The Brain, The Body, and You: Communication

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“Communication means sharing together, thinking together, not agreeing or disagreeing together but thinking, observing, learning, understanding together. Both you and the speaker have to take the journey together.”

~ J. Krishnamurti

www.flowingfree.org
Overview of Workshop

- Successful communication
- Accessibility/Barriers
- Communicating with survivors
- Post-stroke problems and communication
- Various communication impairments
- Communication tips
- Scenarios, role plays
- Resources

**DELANYA PLEASE ADD BEHAVIOUR PIECE HERE IF WE ARE PUTTING THEM TOGETHER 😊**
Characteristics of Successful Communication Partners

- Respect
- A clear message
- A desire to understand the other person’s message
- Trust in the other person to listen
- Empathy for each other
Characteristics (continued)

When the message is not getting across:

- A sense of optimism
- Patience and persistence
- Creativity
- Honest – “I’m sorry…”
Accessibility Matters!

**Communicative Access** refers to the ability of people with language/communication disorders such as aphasia to:

- gain barrier-free access to services
- participate in communicative events
- give and get information
- make informed decisions

(Simmons-Mackie et al, 2007)
Reducing Barriers and Building Ramps

For people with aphasia, communicative access often requires accommodations or “facilitators” to reduce barriers and the disability experienced by people with aphasia (Howe, Worral & Hickson, 2004)
Types of Barriers

- Physical/Architectural
  - Lack of clear signage

- Information/Communication
  - Background noises; people speaking too fast
  - Lack of skilled facilitators and appropriate resources

- Attitudinal
  - Discrimination due to lack of understanding & awareness of aphasia
Barriers (Continued)

- **Attitudinal (continued)**
  - Being ignored and excluded from decisions
  - Being treated as incompetent
  - Losing friends due to inability to participate in conversations

- **Organizational**
  - Staff not receiving adequate training
  - Forms not being made aphasia friendly
Communicating with Survivors: The Basics

- **Ask** how the person wants to be addressed
- **Introduce yourself** and your purpose in being there
- Deal with private matters *privately*
- Be **calm, direct and positive** in all communication
- **Adjust** the environment
- Be aware of **non-verbal messages**
Post-Stroke Problems That Make Communication Harder

- Physical limitations
- Cannot communicate eye-to-eye
- Impaired hearing / vision
- Cannot alter facial expressions
- Has slower or inappropriate responses
- Cannot manage personal care
Terminology

What do we mean by:

- Communication?
- Speech?
- Language?
- Voice?
- Cognition?
Communication

- The exchange of information, ideas, conversation between at least two people
Speech

- The motor movements of the lips, tongue, jaw, vocal tract, etc. that work together to create the SOUNDS we use to communicate

- Impairments: Dysarthria and Apraxia
Language

- The agreed-upon code that a group uses
- Made up of words, grammar, rules, etc., that allow communication to take place
- Impairment: Aphasia
Voice

- The sounds made by the larynx
Cognition

- The “thinking” part of communication:
  - Attention
  - Concentration
  - Memory
  - Visual perception
  - Planning
  - Reasoning
  - Problem-solving
  - Awareness/Self-monitoring

- Disorders: Dementia, strokes which cause damage to the executive centres of the brain
What communication disorders can occur after a stroke?

- Dysarthria
- Apraxia
- Aphasia
- Voice Impairment
- Cognitive-Communication disorders
Dysarthria: A Motor Speech Problem

- Difficulty making speech sounds clearly

- Most survivors with dysarthria have NOT lost language.

- They may still:
  - Think, plan, decide and reason
  - Understand spoken language
  - Read
  - Write, type
  - Use computers of other devices to communicate
Apraxia

- Problem with the COORDINATION of the muscles of speech
- Messages from the brain are not able to reach the speech muscles in a smooth, accurate and rapid manner
- May still be able to understand, read and write
What you can do to help

- Communicate in a quiet place, when the individual is rested
- Repeat what you have understood. Clarify.
- Encourage the individual to slow down, speak up, use gestures
- Encourage writing or using a device as able
What you can do to help (cont.)

- Consider using:
  - Paper and pen
  - A computer
  - Picture / word / phrase board
  - Alphabet board

- Be honest when you don’t understand

- Negotiate – does the person want you to help finish their words / sentences?
Cognitive Communication Impairments

- Reduced ability to understand and communicate clearly related to:
  - Problems with organization of thoughts
  - Attention/Concentration
  - Memory
  - Problem-solving, reasoning
  - Knowledge of non-verbal communication

- Often seen in survivors with right hemisphere strokes
Cognitive Communication Impairments (cont.)

- Fluent but poorly organized
- Wanders off-topic
- Leaves out relevant information
- Makes little eye contact
- May appear rude
- Doesn’t understand / remember what has been said
- Inflexible in thinking
Survivors with right hemisphere communication impairments may be able to:

- Speak clearly in fluent sentences
- Understand direct, concrete communication
- Tell and laugh at familiar jokes
- Read
- Write
Communicating When a Survivor Has Cognitive Impairments

- Remind survivor of topic being discussed
- Ask specific questions to get more information
- Accommodate for left inattention
- Be direct
- Provide immediate feedback if survivor is coming across as being rude
- Provide short printed information/pictures
Aphasia

Difficulty understanding

Difficulty reading

Difficulty speaking

Difficulty writing

APHASIA

Language Disability Caused By Brain Injury

http://www.milkaclarkestrokefoundation.org/aphasia.html
Aphasia: A Loss of Language

- Aphasia is a language difficulty that happens because a stroke has affected parts of the brain that are responsible for language.
- People with aphasia are intelligent adults who know more than they can say.
Communicating when a Survivor has Aphasia

- **Survivors with aphasia can:**
  - Think, plan, decide, and reason
  - Usually produce some clear words
  - Understand facial expressions and gestures

- **BUT:**
  - Difficulty expressing words and sentences
  - Difficulty understanding spoken language
Strategies to Help You Get Your Message “IN”

- Allow time!
- Speak face-to-face
- Appropriate tone of voice
- Communicate one idea at a time
- Short sentences
- Print key words
- Use gestures and facial expressions
More Strategies

- Use objects or simple pictures to help get your message across
- Use YES / NO questions
- Acknowledge that the person with aphasia knows what they want to say but cannot say it

“I know you know…”
Strategies to Help the Person with Aphasia Get Their Message “OUT”

- Encourage:
  - Writing
  - Gestures and pointing
  - Ask yes/no questions (use a written y/n if needed)
  - Use a communication/alphabet board, pictures
  - Encourage all attempts at communication
  - Verify what you have understood
  - Acknowledge lack of time if needed
Yes/No Questions

- Requires practice to ask yes/no questions effectively and efficiently
- Use a written YES/NO for pointing
  - YES    NO    I DON’T KNOW
- Start with broad questions (general topic), then specific
  - “Is it about a person?”
  - “Is it about your family?”
  - “Is it your daughter?”
  - “Are you wondering if she is coming to visit today?”
A Communication Scenario

“I’ll help you get up, showered and dressed and then I’m going to take you to the dining room for breakfast but first you need to take your pill.”

- “Here is your pill to take”
- “Now I am going to help you take a shower”
- “Then I will help you get dressed”
- “After all that, I will take you for breakfast”
Pictographic Topic Pages

- Pictograph pages are a tool to facilitate communication.
- Use the pictographs to provide visual cues to the topic of the conversation.
- Encourage the person with aphasia to point to the relevant pictograph.

www.aphasia.ca
https://www.participics.ca/search/listing?mainsearch=help
Aphasia Institute Free Pictographic Resources

- https://www.aphasia.ca/shop/
Case Study – Video Analysis

- What are some of the strategies used to get the message IN?
- What are some of the strategies used to get the message OUT?
- What were some of the barriers to communication for the patient?
- Was the communicative interaction effective?
- Did the communication partner reveal the individual’s competence?
Video: Paul

- Scenario 1
  
  https://youtu.be/6p96HiIt6FA?t=1142

- Scenario 2
  
  https://youtu.be/6p96HiIt6FA?t=1319
Role Play: Health Worker

- Your patient just rang the call bell. You find him/her sitting at the edge of the bed. You can tell that something is bothering him/her. Find out what it is.

- Role Play #1: Patient Mrs. Devlin
- Role Play #2: Patient Mr. Richardson
Role Play – Patient #1

- Mrs. Devlin
- Aphasia – can say yes/no, use non-dominant hand to print single words
- Worried
- Headaches on the right side
- Pain sharp and constant
- Wondering about possible stroke/TIA
- Want someone to call your spouse and have him come to the hospital right away
Role Play – Patient #2

- Mr. Richardson
- Aphasia
- Repeat the words “why what I don’t know”
- Can draw but cannot print
- Tired and frustrated from too many visitors
- Wants a glass of water
- Would like to lie down to rest
Summary

Remember:

- Be natural
- Use techniques when breakdowns occur
- Start with gestures and gradually add as needed
### DON’T
- Raise your voice. Do not assume the person has a hearing problem.
- Stand over a seated person.
- Frown, cross your arms, or use non-verbal cues that indicate frustration or impatience.
- Ask open-ended questions.
- Rush communication.
- Jump into a topic or move quickly from one topic to another. Don’t ask many unrelated questions.
- Feel like there are no options if words don’t work.
- Get frustrated with the person.
- Forget to acknowledge the person’s intelligence.
- Assume that you understood the message.

### DO
- Use short, simple sentences in a normal tone of voice.
- Position yourself at eye-level.
- Use positive facial expressions and body language to support your message.
- Ask simple yes/no questions (e.g., “Would you like orange juice?”).
- Be patient. Allow time for a response.
- Make each individual topic clear and all topic changes clear (e.g., “Now, let’s talk about your pills”). Then get more specific with questions.
- Print key words, use pictures, specific gestures, simple drawings, and facial expressions.
- Acknowledge the difficulty, take a break and come back later (e.g., “Can we please try again later?”).
- Use phrases like: “I know you know”.
- Always confirm and summarize the response (e.g., “Yes, you want to go to the bathroom.”).
**MESSAGE IN**
- Position face-to-face
- Use gestures & facial expressions
- Establish topic
- One topic at a time
- Use short sentences
- Print key words
- Use simple drawings & pictures
- Watch for body language to ensure understanding
- Ask YES/NO questions

**MESSAGE OUT**
- Allow extra time
- Use support & encouragement
- Identify general topic first
- Encourage gestures & pointing
- Ask YES/NO questions
- Use picture/word boards
- Encourage writing
- Verify the message
Tools & Resources

Canadian Stroke Best Practice Recommendations
www.strokebestpractices.ca

Endovascular Therapy (EVT) Revolutionizes Stroke Care!
Teams can remove a blood clot from the brain of a patient suffering a severe stroke.
Learn More

www.strokenetworkseo.ca
Best Practice & Education

Education Opportunities

Presentations

In This Section
- Education Opportunities
- Presentations
- Guidelines & Recommendations
- Prevention & Vascular Health
- Hyperacute
- Acute
- Rehabilitation
- Community & Long Term Care
- Survivor Stories
- Interprofessional Collaboration
- Patient Education
- Links

Upcoming Events
September 28, 2018

The Why, What & How of Adaptin Exercise Programs for Stroke Survivors
Community & Long Term Care

- Taking Action for Optimal Community and Long-Term Stroke Care (TACLs)


- The Brain The Body and You Workshop Series

- Best Practice Stroke Care Plans for Long Term Care Homes

- Southeast Healthline

- Educational Posters
THE APHASIA INSTITUTE HAS SOME EXCITING NEWS!
Internationally recognized tools & training will be FREE in Ontario

- Information about aphasia in an accessible pictographic format
- A large searchable database of pictographic images relevant to aphasia
- A basic e-learning module
- On-site basic SCA™ training spots
- Consultation services
- An online quality improvement measure for institutions treating stroke patients

https://www.aphasia.ca/
Professional Stroke Education Fund
Shared Work Experience
And
Field Training
Educational Support Programs
Choose the education program that best suits your learning needs

Shared Work Experience Program
One or more learners can spend time learning with a health care provider(s) working in stroke care. A financial incentive of up to $200 is available to support the applicants.

OR

Field Training Program
This program is designed to support an educational event for a group of health care workers working in stroke care. Financial support of up to $200 is available for an Instructor.

Purpose - Further develop stroke-specific knowledge, skill and professional networks for those working in stroke care.

How to Apply
1. Identify the individual or group’s learning needs
2. Select the education program (above) that best suits your needs

www.strokenetworkseo.ca/best-practice-and-education/education-opportunities
This chart is divided into two sections:
1. Resources for stroke survivors and their caregivers/families
2. Resources for health care providers.

### CLIENT/FAMILY RESOURCES

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>DESCRIPTION</th>
<th>WHERE TO ACCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy’s Speech &amp; Language Therapy Inc.</td>
<td>A website that provides free downloads of aphasia resources.</td>
<td>Amy’s Speech &amp; Language Therapy Inc <a href="http://www.amyspeechlanguagetherapy.com/communication-boards.html">http://www.amyspeechlanguagetherapy.com/communication-boards.html</a></td>
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</table>

Aphasia Institute (Toronto)  
Aphasia Centre (Ottawa)  

Web-based resource providing information and tools to support adults with aphasia and their families. To access free downloadable resources from The Aphasia Institute, go to [https://www.aphasia.ca/shop/](https://www.aphasia.ca/shop/) and navigate to box. *If you work or live in Ontario you may be eligible for free downloads of our products. Complete the form and instructions will be emailed.*  

The Aphasia Institute at [http://www.aphasia.ca/](http://www.aphasia.ca/)  
The Aphasia Centre [http://aphasiaottawa.org/](http://aphasiaottawa.org/)

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<tr>
<td>Aphasia Group</td>
<td>Belleville program for persons living with the effects of stroke in the community who are experiencing aphasia. Groups are facilitated by a speech-language pathologist.</td>
<td>Community Care for South Hastings (613) 969-0130</td>
</tr>
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<tr>
<th>RESOURCE</th>
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<tr>
<td>Community-Based Exercise Programs for People with Stroke</td>
<td>Brochure designed for persons living with the effects of stroke and families who are living in the community to assist them in determining if a community-based exercise program will meet their needs. Brochure is based on the provincially developed <em>Guidelines for Community-Based Exercise Programs for People with Stroke.</em></td>
<td>Stroke Network of Southeastern Ontario website under Best Practice &amp; Education at <a href="http://strokenetworkseo.ca/best-practice-education/guidelines-recommendations">http://strokenetworkseo.ca/best-practice-education/guidelines-recommendations</a></td>
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<td>Family Caregivers Voice</td>
<td>Family Caregivers Voice (FCV) is a family caregiver-led group promoting family caregivers' local support groups and encouraging self-advocacy through education. FCV also advocates for changes to the health care system which would improve the life of caregivers. The FCV website includes a video presentation on The Stages of Caregiving.</td>
<td>Family Caregivers Voice <a href="http://strokenetworkseo.ca/best-practice-education/community-and-long-term-care">Family Caregivers Voice</a></td>
</tr>
</tbody>
</table>
USEFUL APPS

The mobile phone/device applications listed below are to be used in addition to medical therapy to improve abilities. Some applications may have an associated fee.

*Disclaimer: These applications are meant to be used in addition to therapy to help develop skills, NOT as an alternative to medical advice or treatments.

<table>
<thead>
<tr>
<th>Thinking Programs</th>
<th>Name</th>
<th>How to access</th>
<th>What it does</th>
<th>iOS or Android</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lumosity</td>
<td><a href="http://www.lumosity.ca">www.lumosity.ca</a></td>
<td>A collection of games geared towards practicing a variety of cognitive skills</td>
<td>BOTH Lumosity (iOS)</td>
<td>Free (in-app purchases Premium: $16.99+)</td>
</tr>
<tr>
<td></td>
<td>Dots: A Game about Connecting</td>
<td>Apple App Store, Google Play Store</td>
<td>Problem solving</td>
<td>BOTH Dots (iOS) Dots (Android)</td>
<td>Free (in-app purchases for extensions)</td>
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<tr>
<td></td>
<td>Brainbean</td>
<td>Apple App Store</td>
<td>Memory</td>
<td>Apple (iOS) Brainbean (iOS)</td>
<td>$0.99</td>
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<tr>
<td></td>
<td>iMimic</td>
<td><a href="http://www.imimicgame.com">www.imimicgame.com</a></td>
<td>Memory</td>
<td>Apple (iOS) iMimic (iOS)</td>
<td>Free</td>
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<tr>
<td></td>
<td>Pictoword</td>
<td>Apple App Store, Google Play Store</td>
<td>Word and image association</td>
<td>BOTH Pictoword (iOS) Pictoword (Android)</td>
<td>Free</td>
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<tr>
<th>Stroke Specific</th>
<th>Name</th>
<th>How to access</th>
<th>What it does</th>
<th>iOS or Android</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>3D Brain</td>
<td>Apple App Store, Google Play Store</td>
<td>Learn about brain functions, disorders, damage, and research</td>
<td>BOTH 3D Brain (iOS) 3D Brain (Android)</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>Spot a stroke FAST</td>
<td>Apple App Store</td>
<td>Help spot the symptoms of a stroke: F.A.S.T</td>
<td>Apple (iOS) Spot a Stroke FAST (iOS)</td>
<td>Free</td>
<td></td>
</tr>
<tr>
<td>Brain tutor 3D</td>
<td>Apple App Store, Google Play Store</td>
<td>Explore the structure and function of the brain</td>
<td>BOTH Brain Tutor 3D (iOS) Brain Tutor 3D (Android)</td>
<td>Free (in-app purchases for extensions)</td>
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## USEFUL APPS

### Speech Assistance & Text-to-Speech

<table>
<thead>
<tr>
<th>Name</th>
<th>How to access</th>
<th>What it does</th>
<th>iOS or Android</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>Speaking assistant</td>
<td>Apple App Store</td>
<td>Speech practice</td>
<td>BOTH</td>
<td>Free (in-app purchase)</td>
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<tr>
<td></td>
<td>Google Play Store</td>
<td></td>
<td>Speaking Assistant (iOS)</td>
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<td></td>
<td>Speaking Assistant (Android)</td>
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<tr>
<td>Dictation Talk to Text</td>
<td>Apple App Store</td>
<td>Speech to Text voice recognition for social media and text messaging</td>
<td>Apple (iOS)</td>
<td>Free (in-app purchase)</td>
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<tr>
<td></td>
<td></td>
<td>Dictionary for Dictation Talk to Text (iOS)</td>
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<tr>
<td>Speech sounds on Cue</td>
<td>Apple App Store</td>
<td>Speech therapy software for articulation difficulty</td>
<td>Apple (iOS)</td>
<td>$17.99</td>
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<td></td>
<td></td>
<td>Speech Sounds on Cue (iOS)</td>
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<tr>
<td>Conversation Starters</td>
<td>Apple App Store</td>
<td>Conversation starters, tips for having a great conversation</td>
<td>Apple (IOS)</td>
<td>$0.99</td>
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<td>Conversations</td>
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<tr>
<td>Speak and Translate</td>
<td>Apple App Store</td>
<td>Speech to speech, speech to text, and text to text translations between many</td>
<td>Apple (iOS)</td>
<td>Free (in-app purchase)</td>
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<tr>
<td></td>
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<td>global languages</td>
<td>Speak and Translate (iOS)</td>
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<tr>
<td>Text to Speech</td>
<td>Apple App Store</td>
<td>Converts typed words and sentences into speech</td>
<td>BOTH</td>
<td>Free (in-app purchase)</td>
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<td></td>
<td>Google Play Store</td>
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<td>Text to Speech (iOS)</td>
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### Voice Test

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<tr>
<th>Name</th>
<th>How to access</th>
<th>What it does</th>
<th>iOS or Android</th>
<th>Price</th>
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<tbody>
<tr>
<td>Voice Test</td>
<td>Apple App Store</td>
<td>Test voice and check for vocal cord health risk</td>
<td>Apple (iOS)</td>
<td>$2.59</td>
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<tr>
<td>Language Therapy Lite</td>
<td>Apple App Store</td>
<td>Boost language skills and enhance speech therapy</td>
<td>BOTH</td>
<td>Free (in-app purchase)</td>
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<td></td>
<td></td>
<td></td>
<td>Lite version (iOS)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Full version (iOS)</td>
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<tr>
<td>Writing therapy</td>
<td>Apple App Store</td>
<td>Spelling and word association from sounds and pictures</td>
<td>BOTH</td>
<td>$24.99</td>
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<td></td>
<td>Writing Therapy (iOS)</td>
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<td>Writing Therapy (Android)</td>
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<tr>
<td>Constant Therapy</td>
<td>Apple App Store</td>
<td>Practice speech, language, cognition, memory, reading, attention and</td>
<td>BOTH</td>
<td>Free (in-app purchase)</td>
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<td></td>
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<td>comprehension skills</td>
<td>Constant Therapy (iOS)</td>
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<td>Constant Therapy (Android)</td>
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