

The science

behind Constant Therapy

FEATURED RESEARCH

Dosage frequency effects on treatment outcomes following self-managed digital therapy: Retrospective cohort study

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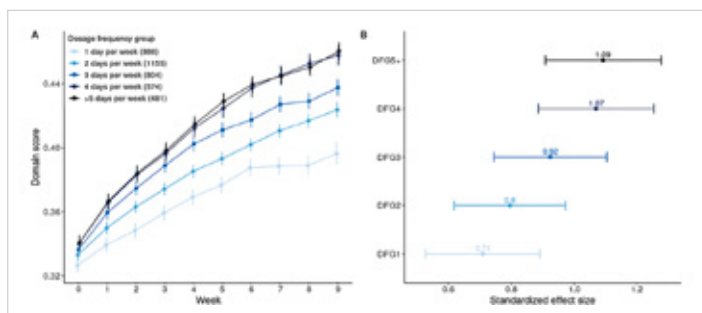
HIGHLIGHTS

METHODS

- Researchers analyzed anonymized data from 2,249 stroke survivors with speech, language, and cognitive deficits who used the Constant Therapy app between 2016 and 2019
- Only patients who had used Constant Therapy at least one day in 10 were included, and patients' data was looked at over a 10 week period, with the first week of data used as the baseline
- Domain scores were calculated for each skill within the app to track overall improvement over the 10 weeks, as well as to track improvement on each individual domain

RESULTS

- Improvement was seen across domains even with as little as 1 day per week of practice
- The rate of that improvement was found to be highly dependent on the frequency of practice; rates of improvement were significantly greater for patients who practiced 2, 3, 4, or 5 or greater days per week vs. patients who only practiced 1 day per week
- 4 days per week appeared to be the optimal amount of practice weekly
- Prior studies have demonstrated that there is a significant dosage gap between the optimal aphasia regimens recommended by the research community and the actual amount of real-world intervention that patients receive in US-based outpatient settings
- Self-directed home-practice programs have the potential to bridge the dosage gap and provide patients with optimal therapy dosage in the face of access barriers to speech therapy services



Change in domain score as a function of dosage frequency group, across all skill domains. (A) The average weekly domain score improved over the treatment period for all dosage frequency groups, but the rate of improvement was significantly greater for the higher versus lower dosage groups. Numbers in parentheses in the legend correspond to the number of unique patients in each dosage frequency group. Error bars represent the SE of the mean. (B) The treatment effect sizes were greater for the higher versus lower dosage groups. DFG: dosage frequency group (1 day per week, 2 days per week, 3 days per week, 4 days per week, ≥5 days per week).

Select research published using Constant Therapy

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