



Hospital Universitario La Paz Fundacion para la Investigacion Biomedica



Verbalizapp afasia

Digital tool to improve communication skills patients suffering aphasia post-ictus

Description and main features

This digital tool has been developed with the aim of improving communication, from early stages, and to promote the recovery of patients who have their language skills impaired (aphasia) secondary to cerebrovascular disease (ictus). **VerbalizAPP-afasia** allows the early start of treatment and unlimited access. It shows real pictures, and just down below, the word corresponding to each picture and a recording that reproduces its sound. It combines images, readings and audio, grouped in different categories, with their corresponding colour code to favour connectivity in the brain by exposure to multiple stimuli. Each patient 's evolution can be remotely monitored, and we aim to develop it further implementing personalised exercise using artificial intelligence algorithms.

Competitive advantages

Our digital tool may be implemented nationally and internationally in Spanish Speaking countries. Only in Spain there are 120000 – 140000 ictus a year found. 45% of these patients will present some kind of language impairment. For that, we estimate that this tool may be used in approximately 55000 patients per year. However, this tool can be easily developed, and versions in other different languages may be available without the need for a complex implementation. Thus, it may be used widely without limitations.

The potential customers for this APP would be people with a language impairment after ictus or public or private institutions in the healthcare area that show an interest in using the App. Furthermore, strategies for the development of advanced strategies for customised treatment adapted for different therapeutic modalities or language impairments of diverse origins, as the exercises can be used to improve the language skills of patients suffering degenerative disease (for example, Alzheimer disease), developmental defects or autistic spectrum disorder.

Kind of collaboration sought

A collaboration for the market entry of this APP is sought. The potential with an interest in this technology are manufacturers, marketers and/or healthcare product distributors, patient's associations and non profit organisations, as well as hospitals and healthcare centres, etc.

Current stage of development

We have developed a Prototype designed by the neurologists, rehabilitation therapists and speech therapists of La Paz Hospital, in collaboration with Kairos Digital Solutions. Thanks to that, we have a 1.4 version available that has been tested, improved and underpinned by its use in patients in our hospital. Workability tests with satisfactory results have been performed and scientific validation is ongoing, for which VerbalizAPP is being used by our patients. We have also developed a website, where the App can be downloaded: https://beta-apps.kairosds.com/afasia-admin.

Current state of intellectual/industrial property

VerbalizAPP has been registered in the platform Safe-Creative with file number 2301243252255.

Mock-up of main application display VerbalizAPP



For further information, please contact Innovation Unit Foundation for Biomedical Research of La Paz University Hospital (FIBHULP)-IdiPAZ Telephone number: +34 91 207 12 34 e-mail: innovacion@idipaz.es Web: www.idipaz.es