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Considering the limitations presented in traditional techniques, these methodologies do not offer many benefits during the cognitive rehabilitation stage. For that reason, efforts have been taken in the previous years to develop systems that monitor the performance of a task and provide feedback, making it familiar, personalized, and attractive for the user. The implementation of smart rehabilitation systems provide a powerful tool for a long-term stroke rehabilitation. Nowadays, ICT-based platforms are designed with the goal of fostering independence in activities of daily living in patients with cognitive impairments. Technical usability is evaluated in a series of pilot experiments, and they illustrate how these approaches may help to retrain patients in activities of daily living. The design of these ICT-based systems provide 4 main features for an efficient and personalized cognitive rehabilitation: support in the execution of complex daily tasks, automatic error detection, home-based performance, and accessibility. The technical solutions used within current European projects are targeted to meet both the end users' needs from the interaction and usability point of views and the clinical requirements associated with the use of such systems. It is demonstrated that successful execution of rehabilitation tasks increase with the use of ICT-based platforms and the use of a smart environment (even at patients' house) improves independence in daily living as well as alleviates occupational therapists' workload.