

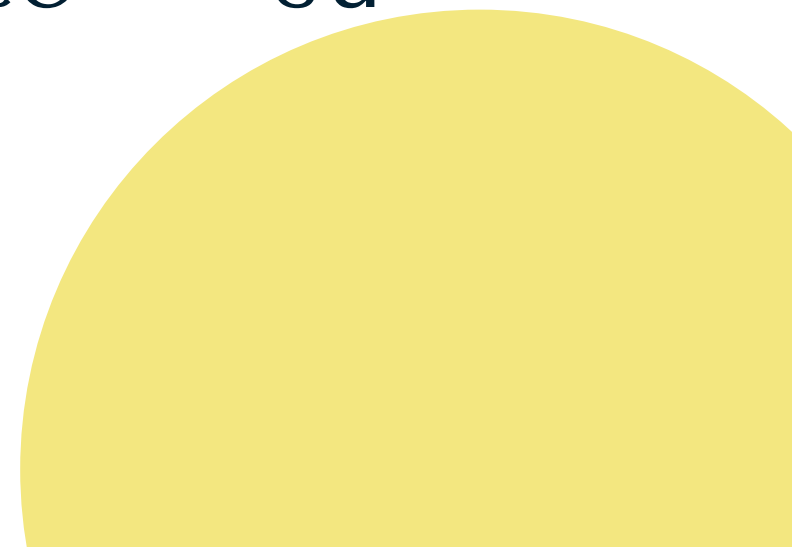
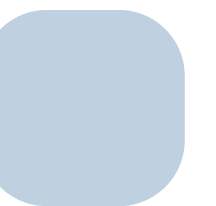
## **EMG PARA MONITOREO DE MOTILIDAD DE MIEMBRO SUPERIOR TRAS HEMIPLEJIA POR ACV**

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# RESUMEN

Se propone un sistema de monitoreo a través de la obtención de señales EMG (electromiografía) para transmitir en vivo y cuantificar la evolución de la capacidad muscular durante el proceso de rehabilitación de pacientes hemipléjicos tras un accidente cerebrovascular (ACV). Este sistema permitirá un seguimiento detallado y en tiempo real, facilitando la evaluación continua y precisa de la recuperación muscular del paciente durante su rehabilitación.



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## CLDR Center for Large Data Research & Data Sharing in Rehabilitation

### Rehabilitation Dataset Directory: Dataset Profile

Dataset: Medical University of South Carolina Stroke Data (ARRA)

#### Basic Information

Dataset Full Name	Medical University of South Carolina Stroke Data

Summary	<p>The Medical University of South Carolina Stroke Data (ARRA*) was a NIH funded study conducted in 2011-12. It was designed to delineate the cause/effect relationship between neural output and the biomechanical functions executed in walking. Subjects included 27 post-stroke patients (at least 6 months post-stroke) and 17 healthy controls.</p> <p>Each subject walked on a treadmill at their self-selected walking speed as well as completing a randomized set of four steady-state mobility capability tasks: walking at maximum speed, and walking at self-selected speed with maximum cadence, maximum step length, and maximum step height. Kinematic, kinetic, and electromyography (EMG) data were collected. The data collected allow scientists interested in EMG analyses of hemiparetic walking to have a test set for their analyses.</p> <p>The data collected includes demographics, clinical assessments, kinetic (from treadmill force plates), kinematic (from active markers), EMG and Over-ground spatial temporal measures (GaitRite Platinum Walkway).</p> <p>* Documentation refers to the study as ARRA: American Recovery and Reinvestment Act</p>
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Sample Size/Notes	<p>44 subjects total:</p> <ul style="list-style-type: none"><li>• 27 post-stroke subjects (6+ months post-stroke)</li><li>• 17 healthy control subjects</li></ul>
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Data Collection

Data Collection Mode	<p>Multiple modes of data collection:</p> <ul style="list-style-type: none"><li>• 12 camera (3D) motion capture system</li><li>• Fully instrumented split belt treadmill measuring 3D ground reaction forces and moments.</li><li>• Electromyography</li></ul>
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