Practical Exosuit Design for Patients with Amyotrophic Lateral Sclerosis

(Technical Report)

Racial Disparities in United States Health Care: Closing the Gap

(STS Research Paper)

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by

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Preface

How are improvements in healthcare being pursued?

How can a textile-based soft exoskeleton be used to maintain the activities of daily living (ADL) of patients with amyotrophic lateral sclerosis (ALS)? The creation of fully soft, upper-limb exoskeletons for rehabilitation of patients with neuromuscular disorders, such as ALS, is an emerging field of study and industry. Of the millions debilitated by these diseases, few can use such robots due to insufficient research. The research team designed a fully soft wearable robotic device that will be able to assist patients with ALS. With IMU and EMG sensors, a cable actuator, and computer programming, the team developed such a device.

How do interest groups, advocacies, and others strive to lessen the racial disparities in healthcare in the United States? Public health agencies report health data and fund health services. To fight for health equity, advocacies in health, civil rights and racial justice have established community health centers, free clinics, and demonstration projects. Insurance companies, hospitals and professional associations have influenced such efforts, in part to protect their own interests.

In the US, racial disparities in healthcare reflect systemic inequalities that contribute to comparable disparities in education, housing, and criminal justice. Despite improvements in some communities within the US there are still millions without the necessary healthcare they need.