AFTER SUFFERING A STROKE, MANY PATIENTS TURN TO AN OCCUPATIONAL THERAPIST TO HELP THEM REGAIN THEIR STRENGTH AND RANGE OF MOTION. HOWEVER, IT USED TO BE THAT OCCUPATIONAL THERAPISTS COULD ONLY MONITOR IMPROVEMENT DURING APPOINTMENTS.

NOW, WITH NEW TECHNOLOGY DESIGNED BY RESEARCHERS AT THE UNIVERSITY OF MISSOURI, OCCUPATIONAL THERAPISTS COULD GET A BETTER LOOK AT HOW PATIENTS ARE RECOVERING IN THEIR OWN HOME. THE NONINVASIVE TECHNOLOGY USES DEPTH SENSORS TO CAPTURE A 3D SILHOUETTE OF A PATIENT’S BODY AND TRACK MOVEMENTS. ASSISTANT PROFESSOR OF OCCUPATIONAL THERAPY RACHEL PROFFITT SAID THAT BY MONITORING PATIENTS DOING EVERYDAY TASKS, LIKE OPENING DOORS OR COOKING, THERAPISTS CAN GET A BETTER PICTURE OF A PATIENT’S PROGRESS.

“This project gives us a look into a person’s ability to move and use their arms in their everyday life, in their own home environment and we can use some fabulous engineering technology such as depth sensors to be able to record, detect those different activities and assess how well that person’s moving.”

PROFFITT SAID THE DATA CAN BE USED TO HELP OCCUPATIONAL THERAPISTS MONITOR WHEN TO INCREASE OR DECREASE THE INTENSITY OF TREATMENT. THE PERSONALIZED THERAPY CAN HELP PATIENTS IMPROVE MOVEMENT QUICKER AND MAKE DAILY LIFE EASIER.

“We can get a sense of being able to change their treatment plan based on the data that we get and that changes the way that we approach rehab.”

I’M BRIAN CONSIGLIO, WITH A MIZZOU SPOTLIGHT ON SCIENCE.