Sensing in At Risk Populations (SARP):
Monitoring performance status, activities of daily living, and independence to promote safe outcomes for elderly patients in rehab, the home and long-term care

SARP is a UCLA research project being conducted at California Rehabilitation Institute. The SARP system aims to gauge the wellbeing and independence level of elderly patients living at home, at-risk of functional decline. The SARP system harnesses the metrics achieved from the Smart Watch (activity) and sensors (indoor localization) to track its user's activity. The system's ultimate goal is to predict improvement and decline in patients to alert caregivers and doctors and prevent hospitalization.

As part of this project patients who choose to participate will be interacting with the following:

1) **Sensors** placed on walls. Think of them as lighthouses. They only broadcast their identity/number and nothing else. They do not record anything, nor do they communicate with any other devices. Our watches can detect sensors only when they are close to the sensor. You may notice these sensors throughout the patient areas in the facility. Please do not remove them. If there are any concerns with their location please notify Dr. Pamela Roberts.

2) **The Smart watch** records the wearer's activity (sitting, standing, walking, bathing and sleeping) and detects the sensors installed throughout the facility.

Dr. Pamela Roberts and UCLA study team members will recruit participants within the patient's first 1-3 days of admission to Cal-Rehab. Individuals who agree to participate will sign an informed consent form, HIPAA form and will be assigned a Smart watch. The watch will be charged each morning and placed on the participants wrist to be worn the remainder of the day and all night.

Participation will last up to 21 days or the length of the patient's Cal-Rehab stay.

SARP participants will wear the watch at all times, including when they are:

- Sleeping
- Bathing
- In Rehab sessions

If you have any problems or questions you can reach the study coordinator, for assistance at (310) 794-0989 or ECRI@mednet.ucla.edu