SmartHome® will enable older adults to stay in their own homes longer through the use of new technologies and community services. In addition, SmartHome® researchers are looking at housing policies and ways to help older adults facing financial decisions. SeniorSMART® researchers are partnering with the University of Kaiserslautern, the Fraunhofer Institute (Inventors of MP3 technology), Sintef, and others to develop, evaluate, and apply new SmartHOME® technology. One of the projects is a fall detection device approximately the size of a quarter. It is placed either on the floor or the baseboard of the house and by using the same vibration technology used to determine the degradation of bridges, the sensor can detect and relay information on a potential fall. This technology is currently being tested in three retirement communities, Lutheran Homes of South Carolina, Still Hopes, and The Oaks as well as Dorn VA Medical Center. In addition, other examples of this new development include a smart cup to monitor adequate fluid intake, a smart refrigerator to detect spoiled food, and software that will allow physicians to remotely monitor vital signs, as well as disease and illness warning signs.

The center focuses on developing technologies, combined with social support networks. In addition, researchers will work with home builders to design elder-friendly homes with built in systems that promote independence.

The Endowed Chair for SmartHome®, Dr. Sue Levkoff, was previously an associate professor in the Harvard Medical School's Department of Psychiatry. She is the first Endowed Chair of three to be hired for the center, and she is in the College of Social Work at the University of South Carolina.