

In Home Health Alert and Remote Co-ordination System.

Abstract :

The unobtrusive monitoring of individuals with in-home sensors offers enormous potential for detecting early health problems--before they become big problems--so timely interventions can be provided to improve the health trajectory. The result is continued high functional ability, independence, and better health outcomes. Early detection of health changes is the key to this approach. This project leverages ongoing work at the University of Missouri in Health Alert Systems with sensor technology. Pattern recognition algorithms are used to look for changes in the sensor data patterns and generate health alerts to clinicians, who provide further diagnosis and determine appropriate interventions. The usability and effectiveness of the remote Health Alert System will be evaluated for managing chronic health conditions. Testing the Health Alert System at a remote site from the healthcare providers will provide important information about how the approach scales up into other settings with high speed video conferencing and transfer of sensor data. This will provide an important next step towards moving the approach into independent housing where seniors want to be and offers potential healthcare cost savings.

This project operates with the understanding that all residents should live in a safe and healthy home and community.

Impact statement

With the aging population and others with chronic health conditions, healthcare costs will explode. This strategy of health change detection with in-home sensing has the potential to recognize very early signs of illness and functional decline so that interventions can be offered before health problems become catastrophic. Thus, healthcare will be more effective. People will have a higher quality of life and more choices about where they age. And we expect to see significant healthcare savings due to fewer hospitalizations and nursing home admissions.

- See more at: <https://www.us-ignite.org/apps/in-home-health-alert/#sthash.EFqHyOkM.dpuf>

The salient features of the project include and not limited to:-

- 1) improve access to and consumption of healthy food and beverages;
- 2) increase linkages to community healthcare resources;
- 3) enhance the quality of and access to smoke-free housing in order to decrease rates of obesity and tobacco-related health conditions – two major causes of preventable death and illness in the U.S.
- 4) ensure the physical and mental well being of the persons of the community.

By identifying the high risk persons and counteracting the health problems affecting them and the community in general.

This model can be expanded to the city and state level as well so that every person lives a life of well-being.