

Wed, June 23, 2004

'Smart' homes eyed for seniors

By **HOLLY LAKE**, Ottawa Sun

If a person's fallen and can't get up, this house will know. It will also remind residents they've left the stove on and will know when they get out of bed at night and haven't returned.

Sound far-fetched? Not so, according to researchers at the Elisabeth Bruyere Research Institute, who are working to make "smart apartments" a reality in the next 10 years.

TAFETA, Technology-assisted Friendly Environment for the Third Age, is studying the use of advanced technology to make it easier for seniors to live safely at home.

By keeping seniors healthy and at home longer, some of the pressure on hospitals and long-term care facilities is offset.

A pilot apartment at the Elisabeth Bruyere Health Centre is being used to test and evaluate the "smart" technology applications created by private partners.

"Right now, it's very much in the stage where we're identifying companies that are already doing stuff or working with a school to help develop something," said Elizabeth Bremner, TAFETA project coordinator.

The long-term vision is to reach a point where homes can be tailored to meet the residents' needs.

"We want to avail seniors of choice," said Barbara Schulman, vice-president of planning and partnerships at SCO Health Service. "We know that most seniors will tell you they want to remain in the community. If this type of project can contribute to that goal, then it's been successful."

PRESSURE CHECKED REMOTELY

Earlier this year, researchers wrapped up a blood pressure study. Using a device created by March Networks, they were able to monitor participants' blood pressure remotely.

Working with students from Carleton University's School of Industrial Design, a fridge monitor has been developed and installed, which after a preset amount of time has passed, will announce to the homeowner that the fridge is open.

Presently under study is a sensor pad that's placed under a senior's mattress. It's connected to a computer and monitors all movement on the bed. If a person gets out of bed, the sensor detects it. With the computer programmed to be aware of a person's habits, failing to return to bed can indicate that they've fallen.

However, Bremner said the project is about far more than filling a home with technological gadgets. A "smart home" will be networked, allowing the many applications in the home to track the resident's habits.

"So if something happens that's not in their normal movement pattern, the computer can

then identify that and send out a warning message and something can be done about it."

Future endeavours include stoves that work based on voice recognition and sensors for water taps.

holly.lake@ott.sunpub.com