Canadians are living longer: according to Statistics Canada, by 2056, the population of Canadians 65 years and older will double to 1 in 4; those 80 years and over will triple to about 1 in 10. But these statistics are of little value to caregivers whose loved ones are struggling with the health issues that come with old age: decreased mobility and increased dependence.

Enter Good Robot: a Toronto-based SME, Good Robot came to George Brown College to refine and commercialize their InHome monitoring system. The Good Robot InHome system allows elderly people to live an active and independent lifestyle in their own homes, while staying connected to their family and caregivers.

How does it work? The system incorporates monitoring technology and sensors throughout the home to measure an individual’s activities and communicate this information remotely to family and caregivers. It learns daily patterns and can detect when a routine has been altered: when the fridge hasn’t been opened, for example, or a medicine cabinet goes untouched. It then sends this information, via text or email, to the caregiver in real-time.

CEO and founder Alan Majer says his goal was to use technology to extend the reach of human care. “I’ve always believed in the ability of technology to augment human capability,” he says. “So finding the right technology was really a match-making exercise between the needs of caregivers and the ability to answer them via intelligent systems in the home.”

Professors Tyler Krimmel in the Centre for Construction and Engineering Technologies, and Dr. Iris Epstein in the School of Nursing at George Brown are further developing and assessing the home-based monitoring system. The project has united students from three academic divisions: Health Sciences students assisted on data capture and analysis; Information Technology handled the technical installation and troubleshooting; and Business Analysis students helped fine-tune the company’s business plan and rollout. Eventually, the company was so impressed with their work that they hired one of the students: Sam Zhang, a Computer System Technology grad, now works with Good Robot full time.

Prior to working with George Brown, Good Robot had conducted their own interviews and survey research but needed the outside perspective to take their product to the next level. “There’s no substitute for hands on experience with the real thing,” Majer says. “We wanted to understand peoples’ experience of our product and learn from that.”

With the assistance of George Brown College, GoodRobot completed a 20 home field trial in Toronto, Ontario. The field trial was rich with insight for the company: the real-world data supplied by both seniors and caregivers provided a better picture for how Good Robot can optimize and improve their product for the market.

“We’ve been overwhelmed by the level of support we’ve received from George Brown,” Majer says. “As a startup, there’s no shortage of challenges that we face on a daily basis, so it’s amazing to have the research team in our corner, helping us to succeed. We’ve made countless improvements to the system as a result of this work.”