

# ARLINGTON COUNTY INNOVATIONS IN HEALTHY AGING CHALLENGE

Bridging the Digital Equity Divide:

Leveraging innovation to enhance Senior Citizens' health, independence and engagement

Culpepper Garden, the County's first and Arlington's largest affordable housing community for seniors, is celebrating its 50<sup>th</sup> year by hosting a technology pitch day competition that will fund demonstration programs for new technologies that help low-income seniors. The competition will award grants to companies and entrepreneurs who submit innovative ideas that leverage emerging technologies for the purpose of improving seniors' health, connection, mobility, and lives. Award winners in each challenge area will have the opportunity to implement their proposed solution and demonstrate the benefits to the Culpepper Garden community and the chance to pilot the new technology for Arlington County.

Through a generous grant program from Arlington County, Culpepper Garden is seeking companies with technologies and approaches that directly help low and very low-income people age 62+ to live healthy and fulfilling lives. Culpepper Garden is seeking technologies and approaches that help address three major challenge areas faced by low-income senior citizens: (detail on target population is on pg. 4).

# Challenge Area I: Improving personal health and access to quality care

Senior citizens heath care needs increase over time while their ability to access care becomes more limited. Seniors, their families, and their care givers must manage complex and wide-ranging medical needs and treatments, often needing access to a limited pool of medical specialists. They may have memory and mobility issues that can inhibit their ability to comply with medical treatment regimens and to get the mental and physical therapy or exercise beneficial to long-term health, independence, and well-being. Culpepper Garden is seeking approaches and technologies (including but not limited to those) that:

- Enable limited income seniors to improve access to medical / health care through remote, virtual or direct access to medical professionals and specialists;
- Allow for the private and timely sharing of medical records, ongoing health status, treatment progress and other important medical information between patients, caregivers and families;
- Provide wearable or other technologies that assist seniors with their own health management or otherwise monitor and report on the health of at-risk seniors;
- Other concepts that improve personal health and access to quality care.

# Challenge Area II: Enabling mobility, connectivity and community

Older adults, especially low-income seniors and those living alone often become increasingly isolated from family, friends and their community due to health, mobility, transportation or access to information. Seniors' health and sense of emotional well-being and quality of life benefit when they can remain active in their community, maintain strong friendships and personal connections, and more independently manage daily activities such as shopping, attending events, and interacting with others. Culpepper Garden is seeking approaches and technologies (including but not limited to those) that:

- Use personal digital assistants to connect and assist seniors to participate in activities; help enable and manage more active schedules, and otherwise help them live more independently;
- Provide wearables or other technology approaches to enable memory and mobility assistance;
- Increase physical stability, enhance walking and standing and reduce falls;
- Provide information and automatically schedule and manage senior participation in local community activities, education, group events, and shared experiences;
- Enable seniors to more independently and efficiently access and complete common daily tasks such as shopping, enjoy entertainment, use transportation, attend medical appointments and participate in local activities;
- Enable seniors to securely connect to family, friends and other loved ones more frequently and fully; and
- Other concepts that enable mobility, connectivity, and increase community.

# Challenge Area III: Helping seniors learn about and use new technology

In many ways the speed of technology development and adoption is creating an even greater gap between younger generations and seniors. Seniors who lead most of their lives without using many technologies are often slow to learn about and find it difficult to master and adopt new technologies that could significantly improve their lives. Many new technologies are not designed to meet the special needs of seniors. Small fonts, controls, sounds, limitations on voice recognition for older voices, and non-

intuitive (for seniors) user interfaces and controls can prove too difficult to older adults to learn and overcome. Culpepper Garden is seeking approaches and new or expanded technologies (including but not limited to those) that provide:

- User interfaces that enable seniors to better utilize technology;
- Training methods and programs that help seniors learn about and use effective technologies;
- Enabling methods for family, friends and care givers to use technologies to help the seniors they care for; and
- Other concepts that help seniors learn about and use new technologies.

### Submission and Selection Process:

A selection committee of local technology businesses, investors, academics/health care providers, senior citizen advocates/care givers and senior citizens will select up to five (5) finalists in each category to give an in-person presentation of their idea to the Selection Committee on November 18, 2019 at Arlington Economic Development.

The selection committee will select up to two (2) finalists per challenge area. Three winners total will be awarded \$12,000 to help fund a pilot implementation of their idea at Culpepper Garden with the option of receiving an additional \$12,000 in year 2 to further develop a solution at Culpepper Garden.

### **Submission Content and Format:**

Culpepper Garden asks companies to submit a one-page summary (in PDF or MS Word format) and a "Pitch Deck" of 15 slides or less (in PowerPoint or other electronic presentation format), to <a href="mailto:pitchday2019@culpeppergarden.org">pitchday2019@culpeppergarden.org</a> no later than October 11, 2019 or via website at https://culpeppergarden.org/about/pitchday2019/

# One Page Summaries

One-page summaries should be limited to one-page 11 pt. font and include:

- Company Name, Address, and short corporate overview;
- Challenge Area to which company is applying;
- Description of need the approach is striving to address;
- Technical approach;
- Benefits to low-income seniors, caregivers, community or impacted stakeholders;
- Proposed business model;
- Scope, including timeframe of potential pilot program; and
- Metrics to evaluate pilot program.

### Pitch Decks

"Pitch Deck" should be no longer than 15 slides and include:

- Company Name, Address, and short corporate overview;
- Challenge Area to which company is applying;

- Description of need the approach is striving to address;
- Technical approach;
- Benefits to low-income seniors, caregivers, community or impacted stakeholders;
- Proposed business model;
- Scope of potential pilot program; and
- Metrics to evaluate pilot program.

'Pitch Decks" may include short videos but may not include appendices or links to other materials. Only the first 15 slides will be included in the evaluation.

### **Oral Presentations**

If a company or individual is selected to present in the final selection "Pitch Day", the company or individual will deliver their "Pitch" using their submitted deck. Oral pitches must be done in under 10 minutes. The Selection Committee may elect to ask questions of the presenters after their initial presentation. Questions and answers will not be time limited.

### Selection Criteria:

The Selection Committee will judge applications on:

- Importance of the need / challenge being addressed to the health and wellbeing
  of the target audience low and very low-income older adults, their loved ones,
  care givers and community;
- The novelty, effectiveness, and sustainability of the approach including:
  - Use of technology to address the challenges;
  - Usability and potential adoption of approach by target users (i.e. seniors, health professionals, etc.);
  - o Novelty of the technical approach;
  - Number of potential customers or people who experience the benefit; and
  - Sustainability of the business model, i.e. can the approach fund itself through modest customer payments, user fees, participant contributions or other funding sources not provided by government or non-profit subsidies?
- The benefits to the users, seniors, the community and other customer / stakeholders in the approach.
  - The potential size and target population that would benefit from the approach;
  - The level of improvement in health, connectivity, mobility, independence or other measure of wellbeing provided to the beneficiaries and how this can/will be measured;
  - The potential costs of implementation or access to the proposed technology or service to low-income seniors.

- The scope of the development and implementation risks of the approach including:
  - Technology readiness and stage of development;
  - The ability to be implemented and effectively evaluated within the oneyear time frame of the pilot;
  - The potential to scale the approach, if effective in pilot phase, to the larger senior community.

# **Demonstration Projects:**

Awardees will implement a pilot of their proposed approach with Culpepper Garden staff, residents or facilities. Pilot programs are expected to be limited in scope and not include all residents (unless otherwise agreed by Culpepper Garden administration). While Culpepper Garden staff and volunteers will be available to assist during the pilot programs, there will be no additional funds or resources made available to awardees other than the awards grant.

In order to meet grant requirements, awardees (after selected for award in November) will need to prepare a draft pilot program plan including resources and support required by Culpepper Garden staff, residents and/or stakeholders. All components, phases and actions of the pilot program must be approved by Culpepper Garden leadership before implementation.

Awardees should be prepared to attend a Project Kick-Off Meeting at Culpepper Garden in December 2019 where they will present their in-depth project idea to Culpepper Garden staff and discuss potential resources and other needed involvement of residents, staff and other stakeholders. Project awardees will then supply a final project plan in January for Culpepper Garden approval.

Awardees will need to provide brief monthly reports to Culpepper Garden on program progress and results as well as a final report at the conclusion of the program. The program plan, monthly reports and the final report must include performance metrics showing project impact on residents and/or improving outcomes for the target population.

# Description of the target population, low-income senior citizens:

This challenge is seeking to directly benefit low to extremely low-income seniors who are the typical population residing at Culpepper Garden. Within the 340-apartment community are 267 independent living apartments and 73 assisted living apartments. Most residents live alone. The average age is 77 years in independent living and 87 years in assisted living. The average income is \$18,000 per year with 44% of residents having a fixed annual income of less than \$15,200 a year. For the winning technology challenge to be successful it must meet the needs of an older, low-income population

who have limited financial resources and remain scalable to future populations with similar financial means.

# Assisted vs. independent living

Culpepper Garden **Independent Living** is an apartment community designed for seniors. Residents are typically able to perform everyday tasks, although Culpepper Garden also provides full-service meal/dining options and residents may contract for housekeeping or care giver services. Onsite amenities include large community space, computer room and space for doctors and physical therapy. Residents in **Assisted Living** are encouraged to be as independent as possible in their own apartments that are furnished with their personal possessions. These residents require help with activities of daily living such as medication management, dressing, bathing, eating, grooming, housekeeping, transportation and toileting, but do not require the intensive medical and nursing care provided in nursing homes. Culpepper Garden has full-time medical personnel, such as certified nursing assistants and registered nurses and access to 24/7 emergency care through a call system in their apartments.