

**Q1** Please provide your contact information below.

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**Q2** Please describe your company or organizations overall goals and mission.

AURORA is dedicated to assisting individuals of all ages with vision and hearing loss, and seniors to enjoy full access, opportunity and dignity in the community, while maintaining optimal health and wellness.

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**Q3** Please indicate which category your organization falls under. **Community Based Organization**

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**Q4** Innovation Executive Summary. Please describe the innovation, and how it addresses the social determinants of health. Please identify how the innovation addresses the 6 innovation criteria (i.e. ROI, scalability, feasibility, evidence based support for innovation, relevance to the Medicaid population and speed to market).

Determinants of Health Addressed by this Innovation

Health and Healthcare

- Access to healthcare, entering the health system
- Access to primary care/trusted provider
- Health literacy

Background and Statement of the Problem

Aurora of CNY has a 100+ year history of equipping individuals with chronic, debilitating vision and/or hearing loss, especially seniors, with the training, technology and support they need to remain functioning and independent in their lives. Clients receive one- to -one or small group intervention, provided by certified Orientation and Mobility Instructor or Vision Rehabilitation Therapist, Hard-or-Hearing Specialists or Complex Care Managers, who assist them to manage their sensory loss and maintain their overall health and well- being

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Among the senior population in the US, 1 out of 3 individuals over the age of 65 has a significant hearing loss that is impacting everyday functioning and 1 out of 4 has a significant vision that cannot be restored. Additionally as many as 1 in 5 people ages 70 years or older have both hearing and vision loss. These conditions and the functional limitations that result from them are not considered to be a normal part of the aging process and require specialized intervention so that they do not interfere with the overall health and wellbeing of the individual.

For example it is well documented that “Low vision and blindness have a significant impact on the physical and mental well-being of the affected individual. Individuals with impaired vision are less able to perform activities of daily living, are less mobile, are more isolated, suffer higher rates of depression, and consequently, have a reduced overall quality of life when compared to their normal-sighted counterparts. In addition, patients with visual impairment have higher mortality rates and are more prone to accidents and falls. As a consequence, elderly individuals with low vision are more prone to injuries than their normal-sighted counterparts. For example, low vision is a well documented risk factor for hip fractures in the elderly resulting from falls”

<https://www.cms.gov/Medicare/Coverage/InfoExchange/downloads/rtcvisionrehab.pdf>

The effects of hearing loss on seniors is multi-faceted affecting social and emotional, as well as, functional and physical wellbeing. “It has now been reported by several authors that hearing loss is an increasingly important public health problem that has been linked to reduced quality of life ( QoL), as it can impair the exchange of information, significantly impacting daily life, especially for elderly people. Reported effects of presbycusis on QoL are:

- – emotional reactions, such as loneliness, isolation, dependence, frustration, depression, anxiety, anger, embarrassment, frustration, and guilt
- – behavioral reactions, such as bluffing, withdrawing, blaming, and demanding
- – cognitive reactions, such as confusion, difficulty focusing, distracting thoughts, decreased self-esteem, and communication disorders.”

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3393360/>

In a study conducted by John Hopkins in 2017 researchers determined that even a mild degree of hearing loss tripled the risk of an accidental fall, with the risk increasing by 140 percent for every additional 10 decibels of hearing loss

(<https://www.healthyhearing.com/report/52548-New-research-links-hearing-loss-to-an-increased-risk-of-falls>)

“Individuals with dual sensory loss report poorer self-health, depression, reduced quality of life, and less interaction with social networks. Older adults with dual sensory loss are more likely than their non-impaired peers to need help with instrumental activities of daily living, such as personal care, medication management, or phone use. They also are more likely to need help with mobility and shopping, and are more likely to live with family members.” (<http://www.hearingreview.com/2011/08/rehabilitation-strategies-for-older-adults-with-dual-sensory-loss/>)

And finally, according to a Community Health Needs Assessment for FY2017-2019, published by St. Joseph’s Hospital in Syracuse reported:

Onondaga County is projected to see a 1.2% decline in the adult population age 18-64 between 2015-2020, however, the age 65+ demographic is projected to grow over the same time period by 15.5%. Falls account for both the #1 (Aged 85+; 410/10,000), #6 (Aged 75-84; 159.7/10,000) and #9 (Aged 65-74; 51.7/10,000) of the top 10 leading causes of hospitalizations among the general Onondaga County population.

Community trends point to an opportunity to address falls in the community among a growing age demographic, examining noted deficits in the availability of in-home support as an area of potential focus for improvement/future work.

([https://www.sjhsyr.org/upload/docs/SJ\\_CommunityHealthNeedsAssessment\\_FINAL\\_E-version.pdf](https://www.sjhsyr.org/upload/docs/SJ_CommunityHealthNeedsAssessment_FINAL_E-version.pdf))

### Access to Care and Health Literacy

It is noted that “while multiple chronic conditions can be effectively managed through coordinated approaches to treatment, providers rarely coordinate with one another and often lack appropriate incentives for improving the overall health of the patient. This places individuals with multiple chronic conditions at a significantly higher risk for adverse drug reactions and preventable hospitalizations. Fragmented service delivery also makes it more difficult for aging individuals to navigate their health choices.

(<http://www.healthpolicyinstitute.pitt.edu/sites/default/files/SternCtrAddressingNeeds.pdf>)

Additional considerations

“Less than 3 percent of medical students enroll in geriatrics electives, while less than 1 percent of nurses and pharmacists have gerontological certifications. Training requirements for direct care workers, which vary from state to state, are often inadequate. Across

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health services professions, certification programs fail to emphasize competencies related to caring for older adults. Finally, surveys of family caregivers also reveal that they have little access to necessary training and skills. These workforce gaps will make it increasingly difficult to provide high-quality care to aging Americans and will limit access to home or community-based long-term care, which the vast majority of Americans prefer to nursing homes.” <http://www.healthpolicyinstitute.pitt.edu/sites/default/files/SternCtrAddressingNeeds.pdf>

### Health Literacy

Health Literacy for seniors is complicated by a number of factors in addition to vision and hearing loss. “There are more than 77 million U.S. adults have basic or below basic health literacy skills. For the growing population of older Americans aged 65 years or older—expected to reach more than 71 million by 2030—difficulties with health literacy can complicate already challenging health problems.

- As many as 80 percent of older Americans have at least one chronic health condition.<sup>7</sup> The more health conditions people have, the more they need to navigate the health care system and interpret complex health information. These tasks are challenging for people with low health literacy. Particular challenges for some older adults are accessing health information on the Internet and using basic math.<sup>8</sup>
- Literacy problems will not always be obvious to you. Some people hide their problem out of shame, or they may not recognize the difficulty they have with reading. Such individuals may not ask important health questions, or they may misunderstand a health care provider’s directions.” <https://health.gov/communication/literacy/olderadults/literacy.htm>

### Innovation

As demonstrated, seniors with vision or hearing loss or both are at greater risk for a myriad of negative health outcomes associated with sensory loss and are also statistically more likely to be hospitalized for falls and health conditions that are further complicated by these conditions and often accompanied by other chronic health conditions Due to these impairments and the impact on the social, behavioral and physical health of the elder, the social determinants or health that are related to

- Access to healthcare, entering the health system
  - Access to primary care/trusted provider
- and Health literacy are impacted.

To address this AURORA proposes to work with an area hospital to embed a specialized Senior Health Navigator who is prepared to connect patients directly with the vision and hearing rehabilitation professionals, as well as, other community based senior service providers to ensure smooth care transitions, improved access to health care and health literacy through support, coordination, community referrals and direct patient education.

As part of this innovation, AURORA will offer state of the art, system-wide Sensitivity Training that it has developed entitled “Enhancing the Health Care Experience for Individuals with Vision/Hearing Loss”™. This interactive train-the-trainer curriculum prepares staff at all levels to more adequately assess and address the needs of patients with vision or hearing loss in their care.

#### 1) Potential Return on Investment:

Absent changes to a fragmented system of care delivery which rewards high-cost rather than high-quality care, the burden of healthcare spending for the aging population will soon become unsustainable for taxpayer-funded programs like Medicare and Medicaid, as well as individual consumers paying out-of-pocket. Between 2015 and 2025, annual Medicare spending is projected to double to \$1.2 trillion dollars. The median annual out-of-pocket costs for Americans age 65 will rise to \$6,200, nearly double what it was in 2010.

<http://www.healthpolicyinstitute.pitt.edu/sites/default/files/SternCtrAddressingNeeds.pdf>

Therefore, any innovation, such as the proposed Senior Health Navigator, that aims to reduce fragmentation and that is especially designed to address the barriers of vision and hearing loss to access to care will positively effect appropriate transitions of care and significantly reduce the cost to the health care system.

#### 2.) Scalability

While we will begin the implementation of the innovation by embedding one Senior Health Care Navigator in one area hospital, this model of patient navigation can be scaled to each hospital in the area and applied to every region.

#### 3.) Feasibility

AURORA of CNY, Inc. as a non-Medicaid funded, community based rehabilitation and service provider is uniquely positioned as a

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bridge between hospitals and the health care system, the long term care system, and the senior service provider network within our community. Our workforce interfaces with all of these systems as a “clearinghouse” and connector for seniors that need to access all systems of care.

Our staff are specially trained and equipped to address the barriers to care of vision and hearing loss and provide advocacy and access to care through complex care management for all seniors. We have been functioning in the capacity for decades as a resource in this community for providers and the senior population.

We have had an on-going working partnerships and affiliations with all of the hospitals in the region, but most predominantly with St. Josephs Health. We are currently a down stream provider or Health Home Care Coordination services for them.

These professional alliances make it feasible that AURORA can play a crucial positive role in impactation the social health determinants through this innovation.

### 4. Evidence Based Support for Innovation

Although the data on the benefits for patient navigation in general have been modest, the data that focuses on communities-at-risk demonstrate a much greater impact of patient navigation. The analysis of the overall Patient Navigation Research Program demonstrated that navigation had the greatest benefit in patient populations with the greatest needs and the lowest rates of diagnostic and treatment timeliness. The same trial also demonstrated that there were specific groups of patients who had the greatest benefit of patient navigation. Patients who reported a greater number of barriers to care ,and specifically patients with social service barriers (those considered the social determinants of health) including insurance, income, education and family stability, and safety had the greatest benefits to navigation.” (Karen M. Freund (2017) Implementation of evidence-based patient navigation programs, *Acta Oncologica*, 56:2, 123-127, DOI: 10.1080/0284186X.2016.1266078)

In an article relating a compilation of evidence based studies of Patient Navigator effectiveness is was found that “particular aspects of access were improved such as access to: a primary care medical home, primary care as soon as it was needed;... culturally appropriate care and medications. .. Patient encounters and communication with primary care were increased with navigation programs such as increased visits, improved communication, more reviews, check-ins and/or goal setting conducted and links made to other providers.

Two randomized controlled trials focused on caregivers of older patients with multiple chronic conditions applied the Guided Care Program with nursing support. In the trial led by Foret Giddens et al., caregivers felt less strain. This was supported by Wolf and colleagues who found modest benefits in reducing depressive symptoms as well as caregiver strain among caregivers with their navigation program.

Provider outcomes were reported in nine studies including feelings of satisfaction with navigation programs as well as increased communication among primary care providers and community services and among providers...

A few papers reported on health system outcomes, which included a reduction in emergency room and/or hospital use and the prevention of premature institutionalization for older adults.” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5294695/>

### 5.) Relevance to the Medicaid Population

The relevance to the Medicaid population is the same as in the general population of seniors who have vision or hearing loss or other barriers to access care. It is understood and demonstrated that provider systems serving Medicaid members need to make engaging members about their health a priority, as well as, facilitating access to care. These two aspects are critical to improving healthcare outcomes for people on Medicaid. However, finding and engaging these members presents unique challenges, oftentimes driven by insufficient or inaccessible information, language and functional barriers. Also, Medicaid members represent a heterogeneous mix of individuals (i.e. children, low-income adults, elderly, disabled, urban/rural, etc.) that require different approaches to effectively engage them. This innovation will address these barriers through a comprehensive outreach, engagement and connectivity protocol based on our past experience serving special populations and people who have Medicaid insurance.

### 6) Speed to Market

Once funding is received and alliance/agreement is in place with St. Joseph’s a Senior Care Navigator can be hired and could begin immediately. This process would be estimated to take 3 months to launch.

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**Q5** Was your innovation implemented? If so, please explain when, the number of people impacted, and the results.

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**No**

**Q6** Please identify the SDH Domain that your innovation addresses. (Select all that apply.)

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**Health and Health  
Care**

**Q7** I give the Department of Health the right to share the information submitted in this application publicly (for example: on the DOH website). I understand that there is no monetary reward/reimbursement for my submission or for attending the summit should my innovation be selected.

**I consent to have my innovation  
shared**

