

**optimizedcare**  
network

PO Box 935  
15 South High Street  
New Albany, OH 43054  
(614) 629-8060  
<http://www.optimizedcare.net>

**Affordable  
Housing**



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For inquiries, contact: Optimized Care Network, PO Box 935, 15 South High Street, New Albany, OH 43054; (614) 629-8060. For online inquiries, visit the Optimized Care Network website at: <http://www.optimizedcare.net>

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## Connecting Health and Housing Through Telehealth: Supporting Aging in Place

Consider the following:

- Over 25 million Americans aged 60+ are economically insecure—living at or below 250% of the federal poverty level (FPL) (\$29,425 per year for a single person). These older adults struggle with rising housing and health care bills, inadequate nutrition, lack of access to transportation, diminished savings, and job loss (*National Council on Aging*).
- Older individuals of lower socioeconomic status have increased mortality rates (*Bassuk, Berkman, & Amick, 2002*), higher stroke incidence (*Avendano, et al., 2006*), higher incidence of progressive chronic kidney disease (*Merkin et al., 2007*), lower health-related quality of life (*Huguet, Kaplan, & Feeny, 2008*), smaller social networks and lower quality of social relations (*American Psychological Association*).
- The aging population will strain the capacity of government programs that support seniors (and, by extension, federal, state, and local budgets) and will increase demand for affordable and age-appropriate housing (*Evidence Matters, US Department of Housing and Urban Development*).
- At the federal level, the portion of the budget devoted to Social Security, Medicare, Medicaid, and interest payments on the federal debt will increase from 44.4 percent in 2010 to a projected 61.8 percent in 2020 (*Evidence Matters, US Department of Housing and Urban Development*).

Whether your home is the house in the community where you raised your children, alternative housing in a continuing care retirement community, or an apartment in an affordable housing complex, living as independently as possible and aging in place are goals commonly held by older adults, no matter their socioeconomic status.

As our population ages, and more older adults live under the strain of rising costs, the need for supportive services and innovations in the delivery of care will become increasingly important. Couple the economic challenges of aging with inevitable health related changes, and we quickly see how the goal of aging in place is at risk. Some of the consequences – loss of independence and personal choice, decreased quality of life, higher costs to the health care and long-term care systems, and increased family caregiving burdens. For residents in affordable housing complexes and their families, these challenges are the realities of everyday life.

### Health and Aging

According to *A Profile of Older Americans: 2014*, from the Administration on Aging, most older persons have at least one chronic condition and many have multiple conditions. In 2011-2013, the most frequently occurring conditions among older persons were:

- diagnosed arthritis (49%),
- all types of heart disease (31%),



- any cancer (25%),
- diagnosed diabetes (21% in 2009-2012),
- hypertension (high blood pressure or taking antihypertensive medication) (71% in 2009-2012).

These chronic conditions are of particular concern for the health care and long-term care systems as policymakers and providers strive to provide coordinated care while managing ever-expanding costs.

## Health and Housing

The US Department of Housing and Urban Development (HUD), through its *Evidence Matters* publication points out that, state and federal governments will be especially burdened by the expanding demand for Medicaid-funded services. Long-term care is a matter of particular concern for state policymakers because it constitutes nearly one-third of all Medicaid spending.

Although it constitutes a decreasing share of total expenditures, institutional care continues to account for more than half of Medicaid expenditures for long-term care services. Helping seniors delay or avoid institutionalization by facilitating aging in place has the potential to significantly reduce public spending on long-term care. Kaye, Harrington, and LaPlante estimate that supporting a resident in a nursing home costs five times more than in a community setting. Critical to unlocking this potential savings, then, is meeting the housing and health needs of seniors in their current homes and communities.

## Telehealth, Person-Centered Care and Affordable Housing

Telehealth services are constantly evolving. On the forefront of the digital health explosion is telemedicine, or providing clinical services to patients from remote locations. Telemedicine can be delivered through a variety of mediums such as videoconferencing, web portals, and mobile devices such as tablets and smartphones to help produce positive healthcare outcomes, reduce spending and increase efficiency. Considering that on average, the typical emergency department visit, including round trip ambulance services, costs \$2,500, telehealth solutions offer an economic opportunity in conjunction with supporting quality of life goals for the older adult.

Further, a Spring 2012 report titled, "Telehealth in Skilled Nursing Facilities: Opportunities to Improve Quality, Health and Costs of Care," prepared by A. Broderick et al, states that the Veterans Health Administration offers robust evidence of success with remote patient monitoring from its home telehealth program offering routine non-institutional care and chronic-care management for over 60,000 patients. Overall, the VHA's program showed a 25 percent reduction in bed days of care and 20 percent reduction in numbers of admissions in 2006 and 2007. The \$1,600 cost of the program (USD per patient per annum) is significantly lower than



home-based primary care services (\$13,121 USD per patient per annum) or nursing home care (average \$77,745 USD per patient per annum).

Telehealth provides an opportunity to “meet patients where they are” by providing responsive and readily accessible personalized care, care coordination, and chronic disease management focused on reducing hospitalizations and the need for higher levels of care.

Affordable housing communities, where 100-200 residents live in close proximity, are perfect environments for the incorporation of telehealth to address the health and wellness needs of vulnerable populations of residents. Through telehealth care, residents are able to fully partner with the healthcare team to increase access to affordable care, prevent complications of chronic disease, and increase understanding of and feelings of control over their own health. Telehealth supports individual goals of aging in place.

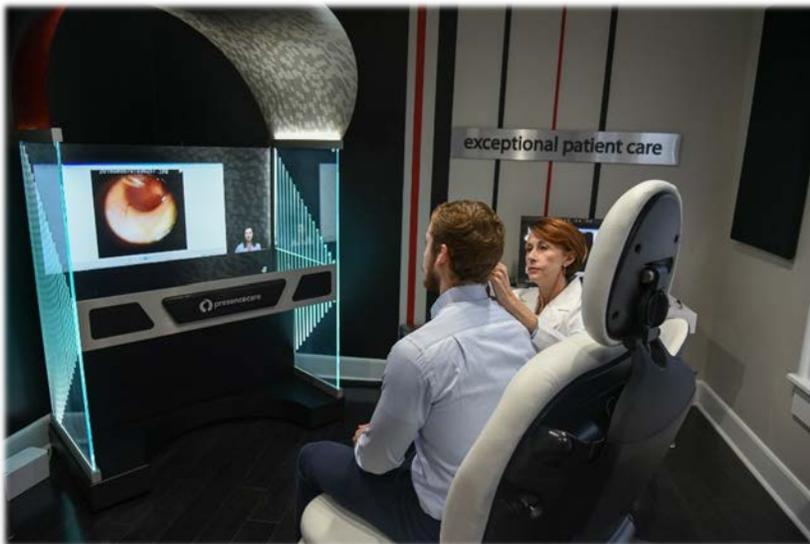
## The Optimized Care Network (OCN) and Affordable Housing

OCN provides a digital health environment equipped with real-time interactive systems utilizing videoconferencing technologies and specialized digital medical instruments that provide the remote physician or nurse practitioner the opportunity to examine the patient at the originating site – connecting with the patient in a life-like manner.

The PresenceCare™ video technology enhances personalized health care and allows providers to form relationships with their patients from a distance. The videoconference may also include, via split screen technology, a collaborating medical specialist, language translator, family member, and/or a supporting member of the health care team including care coordinator, social services provider, pharmacists, dietitians, and diabetic educators.

The Optimized CareSpace™ is changing the way healthcare is delivered – putting the patient at the center. The CareSpace is designed with the patient/provider relationship in mind:

- The CareSpace examination rooms combine the latest 3D imaging technology with state-of-the-art medical devices.
- Healthcare providers see, diagnose, treat and interact with patients – even when the doctor or nurse practitioner and patient are miles apart.
- Follow-up care and coordination between multiple providers is improved with information being automatically stored in a cloud-based electronic health record (EHR).
- Staffed with an RN Care Coordinator, who facilitates the hands-on examination and ensures a personalized, warm and caring experience for the patient – combining high tech with high touch.
- Nurse Practitioners and Physicians are fully engaged in patient care while the RN Care Coordinator handles all documentation and paperwork.



How the OCN solution works in the Affordable Housing setting:

1. When a resident is identified as having an acute issue or needs follow-up for disease monitoring, the RN Care Coordinator will contact the OCN team.
2. The RN Care Coordinator may see the resident in the CareSpace clinic, using PresenceCare™ video technology, or may take the Transportable Exam Station or Point of Care Tablet to the resident's apartment depending on the resident's health situation.
3. The RN Care Coordinator will have access to the EHR portal and can update the system with the chief complaint, vitals and any other clinical information.
4. Upon review of the encounter, the nurse practitioner or physician will work with the RN Care Coordinator and the patient to identify the causative issue and, if appropriate, suggest a course of therapy that does not involve transport to the emergency room.
5. The patient/resident will be treated in their affordable housing apartment and followed by an OCN provider until, he/she improves clinically or transport to the hospital is required.
6. If transport to the emergency room (ER) is necessary, provider-to-provider communications will take place to ensure excellent continuity of care is received.
7. Documentation completed by the OCN provider will be disseminated per protocol to the patient's PCP and others as authorized by the patient or guardian.
8. Once the encounter is completed, an electronic charge will be submitted.



## In Conclusion: Supporting Aging in Place Through Telehealth

The Centers for Disease Control and Prevention defines aging in place *as the ability to live in one's own home and community safely, independently, and comfortably, regardless of age, income or ability level.*

Further, a recent LeadingAge article states, the demands on affordable housing providers are growing as their residents age in place with escalating medical and supportive care needs. More care, coordination and collaboration are required to help residents remain independent in their homes for as long as possible and manage their health effectively.

Affordable housing providers have a long history of supporting their residents, through the employment of Service Coordinators, with the acquisition of needed services. As part of the long-term services and support network, affordable housing providers are perfectly positioned to take the next step in assisting their residents in achieving their aging in place goals. This allows them to truly connect health and housing – by promoting healthy lifestyles, managing chronic diseases, and addressing acute health situations that could lead to emergency room visits, hospitalizations and transitions to higher levels of care such as nursing home admissions.

In 2012, 23 percent of people age 75 and over had 10 or more visits to a doctor or other health care professional in the past 12 months compared to 14 percent among people age 45 to 64. Additionally, 6.8 million people age 65 and over stayed in a hospital overnight at least one night during the year. This is approximately double the number of overnight hospital stays for the population age 45 to 64. *A Profile of Older Americans: 2014, Administration on Aging, Administration for Community Living, US Department of Health and Human Services*

Bringing telehealth solutions into the affordable housing environment demonstrates person-centered care by potentially avoiding transports to the emergency room and the stress that accompanies that experience. This decreases the risk of infections often associated with hospital admissions for older adults, and provides the ability through technology to coordinate care by involving multiple care providers directly with the resident at the time of the health care crisis.

Additionally, given the prevalence of chronic conditions in the older population, telehealth allows for accessible, on-site disease monitoring to empower residents to maintain their highest level of function possible – therefore achieving their aging in place goals in partnership with the affordable housing provider.

A collaboration between the Optimized Care Network, affordable housing providers and residents is an important advancement in person-centered care through technology that fosters aging in place for some of our most vulnerable citizens.