

# TeleDementia

## An OSF Innovation Case Study

### THE OPPORTUNITY

Dementia, including Alzheimer's disease and related disorders (ADRD), represents a growing epidemic in the United States, particularly in rural communities. ADRDs are the sixth leading cause of death, growing by 71 percent between 2000 and 2013. Rural health studies show non-metropolitan areas tend to be disproportionately affected by ADRDs due to greater aging communities and limited access to care. Individuals suffering from ADRDs in rural areas tend to receive suboptimal care, experience unnecessary hospitalizations and are less likely to be diagnosed with an ADRD overall.



### THE SOLUTION

OSF Innovation is providing accessible, specialized care solutions for dementia patients living in rural communities across the Ministry through OSF TeleDementia. The OSF HealthCare Illinois Neurological Institute is serving communities around Galesburg and Ottawa, Illinois, with unprecedented access to dementia care through telehealth since 2017. Employing sophisticated tele-carts equipped with video conferencing technology, a cognitive neurologist can administer full dementia care visits for patients in rural communities that previously had limited options for care.

### THE IMPACT

OSF HealthCare is providing timelier, localized access to expert dementia care for patients located in two rural communities. Through the use of OSF TeleHealth, the neurologist can expand access to service without incurring additional travel time or requiring patients to travel long distances. In nine months, OSF TeleDementia provided more than 170 dementia care visits to rural patients, eliminating the need to travel as far as 100 miles to see a provider. OSF TeleDementia allows OSF HealthCare the ability to better serve patients by expanding its reach and impact of service.

### OSF TELEHEALTH

OSF TeleHealth Services utilizes innovative technology to connect patients to their health care providers. The result is better outcomes and care that meets the needs of patients — wherever they are.

### OSF INNOVATION

Launched in 2016, OSF Innovation is the overall umbrella initiative for the planning, structure, goals and services OSF HealthCare uses to innovate for the improvement and transformation of health care.

To learn more, visit [osfinnovation.org/CaseStudies](https://osfinnovation.org/CaseStudies)

## UNDERSTANDING THE NEEDS OF RURAL COMMUNITIES

In 2015, the Alzheimer's Association (AA) estimated there were 5.3 million cases of Alzheimer's and related disorders (ADRD) in the United States, with a projected rise to 8.4 million by 2030. The challenges of dementia care are being exacerbated in rural communities by issues related to the aging baby boomer generation — migration of retirees to rural areas, the growing desire to “age in place” and out-migration of youth to urban areas.

The AA reports 20 percent of the population in non-metropolitan areas is over the age of 65. Because of ADRDs, the mortality rate was 11 percent higher in rural areas between 2005 and 2009. On top of this, ADRDs may also contribute to other health challenges. For example, studies show rural health patients are less likely to receive an influenza diagnosis, have shorter hospital stays and are 50 percent more likely to die from influenza.

Care for dementia patients is limited to a subset of specialized neurologists, meaning that referred patients may not have convenient or timely access to care. Recognizing the challenges for individuals seeking dementia care, OSF Innovation joined with OSF INI to help solve this problem for rural communities by developing the OSF TeleDementia program, which employs the use of OSF TeleHealth applications.

## UNPARALLELED ACCESS TO CARE THROUGH INNOVATION

Using video conferencing technology run through a clinical tele-cart system, OSF TeleHealth began offering tele-visits for dementia patients at the Galesburg OSF INI in September of 2017. OSF TeleDementia has been expanded to the OSF INI Ottawa location and there are plans to serve more rural communities.

OSF TeleDementia patients check in to their respective OSF INI clinic locations as they would for an in-person appointment with their provider. Vitals and medication history are taken by nursing staff, and proper documentation is recorded in the patient electronic

medical record. Patients along with approved caregivers are then guided to a private room with a tele-cart equipped with high-quality video conferencing technology and clinical assessment tools that allow the patient and physician to interact with the help of a tele-presenter. Patients of OSF TeleDementia receive a full standard of care — including a cognitive and neurological examination.

After the assessment, the physician discusses the findings and any additional testing needed to facilitate a diagnosis. A second encounter is typically scheduled after testing has been completed to discuss the diagnosis, management and treatment recommendations. At the conclusion of any visit, an after visit summary with detailed instructions is provided to the patient. The use of OSF TeleHealth technology allows neurologists to administer full 90-minute dementia care visits to patients remotely located throughout the Ministry.

*“Since August 2017, telemedicine has allowed me to expand my presence to patients in two rural OSF INI locations via video-conference sessions. This has allowed me to provide accessible care to many patients who, due to mobility problems and convenience, would prefer to be seen closer to home.”*

- **JULIA BIERNOT, MD, COGNITIVE NEUROLOGIST,**  
**OSF HEALTHCARE ILLINOIS NEUROLOGICAL INSTITUTE**  
**MEMORY & DEMENTIA CARE CLINIC**

## RESULTS:

Through OSF TeleDementia, patients are able to meet locally with specialized physicians who can provide care without sacrificing their available hours to travel time. In less than a year, OSF HealthCare neurologists have provided more than 170 dementia care visits to rural patients who would normally be required to travel as far as 100 miles or more to see a provider. OSF TeleDementia is enabling our specialized providers the ability to better serve patients and expand their impact of care.

To learn more, visit [osfinnovation.org/CaseStudies](https://osfinnovation.org/CaseStudies)

To learn more, visit  
[osfinnovation.org/CaseStudies](https://osfinnovation.org/CaseStudies)

