CASE STUDY

LEXINGTON HEALTH NETWORK

Contributors:

Mary Franks
SVP Clinical Operations

Allen Pindell
SVP of IS and Analytics

LeadingAge® CAST
center for aging services technologies

The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

CURATESS

Lexington Health Network and Curatess Open Telehealth Platform

Categories

Staff Efficiencies
Hospitalization and Hospital Readmissions
Change in Condition Management

Organization Name

Lexington Health Network (LHN)

Organization Type

Skilled Nursing Facility (SNF) with Independent, Assisted, and Supportive Living, as well as Home Health, Hospice, and Private Care

Other Partners

Curatess, LLC, Open Telehealth Platform Provider www.curatess.com

- Paul Knight, Founder & SVP of Operations Paul.Knight@curatess.com

Paragon Clinical, Advanced Practitioner Nurse Group www.paragonclin.com

- Dr. Mary Beth Sutkowski, MD, Chief Medical Officer
- Jennifer Edens, MSN, ACNP, VP of Clinical Services

Organization Description

Lexington Health Network (LNH) is one of Illinois' premier providers of short-term rehabilitation and long-term care services. The comprehensive network of senior services located in the Chicagoland area includes 10 skilled nursing facilities (SNFs), 2 independent and assisted living retirement communities, a supportive living community, home health, hospice, private care, as well as sleep diagnostic and therapy services.

Project Description

The quantification of using open telemedicine, integrated with a patient's medical record and medical peripherals in order to better manage return to hospital (RTH) rates, leave of absence (LOA) rates, and operational inefficiencies. LHN leverages an integrated open telemedicine platform to connect remote nurse practitioners to provide better clinical care during nights, weekends and holidays enabling comprehensive access to care to reduce the need to call 911 and patient transfers. By managing patients in place, the SNF improves the opportunity to retain revenue and limit financial penalties associated with high care setting transfers.

Telehealth and RPM System Type

The Curatess Essential Care Open Telehealth Platform provides synchronous (real-time) telemedicine with complete EHR/EMR and medical device integration allowing for a comprehensive remote evaluation and care team coordination.

Telehealth and RPM System Embodiment

Clinician to clinician interaction with the patient over the internet within any healthcare setting. Medical professionals operate with access to mobile and web applications. Features a single telehealth cart per location including a medical grade cart, secure tablet mount with an Android tablet, Eko Core Bluetooth stethoscope, Bluetooth keyboard\headset, with a single medical grade power cable to power/charge all devices.

Business Model

The business model and catalyst for the study was driven by internal and external pressures. External factors: Hospital Readmission Reduction Program, Value-Based Purchasing, ACO and Hospital Preferred Networks. Internal factors: Medicare Revenue Retention and quality of care and access to advanced medical professionals.

Implementation Approach

The Essential Care Open Telemedicine Platform empowered LHN nurses to gain access to remote Advanced Practitioner Nurse's (APNs) to provide comprehensive medical care for sudden change in conditions during the evening, weekends, and holidays. LHN partnered with Paragon clinical to provide advanced practice nurse coverage not only during the day but also in the evening, weekends, and holidays. The partnership between Lexington and Paragon allowed for 24/7 advanced practice nurse coverage throughout all 10 skilled nursing facilities. The response from patients, family, staff, and acute partners was well received, and LHN was one of a few LTPAC providers using telemedicine in the Chicagoland area.

LHN began using the first generation Curatess Telehealth Platform in 2015 to help manage patients in place and reduce care setting transfers. The initial implementation of the Essential Care Platform was a non-integrated traditional video conference telemedicine solution with a wired stethoscope. The first generation platform required nursing staff to initiate a phone call to the on-call Paragon APN. The Paragon APN then determined if a telemedicine session was required and the APN would initiate a telemedicine call to the facility.

In October of 2017, LHN began to implement the second generation Curatess Essential Care Open Telehealth Platform across all 10 SNFs. The integrated open telehealth Platform integrated Admit Discharge Transfer (ADT), medications, vital signs, laboratory results, clinical notes, and advance directives. Essential Care-enabled mobile devices allowed access from any PC, Mac, or Linux device, and required no specialized equipment. In addition, the open telehealth platform integrated with a Smart Bluetooth stethoscope to deliver diagnostic quality stethoscope sounds to the remote clinician and enabled remote stethoscope audio focus controls, giving the physician control over what they hear. An integrated open telehealth platform provides streamlined access to patient clinical information during a telemedicine call, ensuring the remote clinician, such as a physician or APN, as in this case study have required information to make effective clinical decisions. The new workflow allowed the LHN nursing staff to initiate a video telemedicine call to the Paragon APN group, allowing the remote APN to evaluate the patients with detailed clinical and diagnostic information on the first call. In both generation 1 & 2 implementations, LHN featured a single telehealth cart at each SNF.

Outcomes

The chart below highlights two important outcomes from the use of telemedicine within the Lexington Health Network skilled nursing facilities. First, telemedicine calls had a positive increase over the past three years. Lexington Health Network has incorporated telemedicine into the standards of care for all SNFs. Second, Lexington has observed an increase in the percent of change in condition encounters that were managed in place when telemedicine was used. In addition, the nursing staff and DONs greatly appreciate having telemedicine for remote access to APNs around the clock.

Measures	2015	2016	2017	2018*
Telemedicine Calls Annual Growth	0	181%	52%	100%
Change in Conditions Managed in Place (No RTH)	N/A	64%	71%	90%

*2018 numbers annualized from data from January thru May

Lexington Health Network began using the second generation Curatess Essential Care Open Telehealth Platform beginning October, 2017.

Major Findings - Retained Revenue with Telemedicine (over 3 years)

Estimated Retained Revenue: $975,000*

Telemedicine Expense: $285,000

Net Gain: $690,000

*Blended daily rate of $421. Based on population evaluated, assumes 1 day leave

For every $1 LHN spends on Curatess' Integrated Open Telehealth Platform, LHN retained $2.42 of revenue.

Challenges and Pitfalls to Avoid

1. Physician education is critical to a successful telehealth program implementation. Facility operators need to ensure the physicians who operate in the facility understand the telehealth will not impact their billing.

2. It is important that all staff are educated on the telehealth platform, program and the benefits to your patients. The sales team and floor staff should be able to speak to the telehealth programs success and organization's value proposition.

3. Facilities should not overextend on monthly fees. Organizations should control fees and complexity to maximize outcomes and adoption. Keeping the telehealth cart simple with low fees will have a greater impact on the organization and patients.

Lessons Learned

1. Ensure that the medical director understands how telehealth will be used to improve access to care for patients in the facility. Getting your medical director to support the telehealth program will improve overall physician adoption and acceptance.

2. Before you roll out the telehealth program, be certain to have a written usage policy and procedure. The care team should know when telehealth can be used and when 911 should be contacted. Telehealth is not designed to replace 911 for emergencies; be certain policy and procedures are well defined and communicated across the organization.

3. Choosing an easy-to-use telehealth solution will help you have a successful implementation. Your telehealth partner should have educational training videos and/or training in place. It is recommended to schedule staff training on all three shifts. Training sessions should be led by a corporate or facility trainer to ensure the success of the training sessions. A "train-the-trainer" approach is highly recommended and the facility should identify a minimum of one employee per shift as the telehealth "super user".

4. Educate your patients and families about your telehealth program. Marketing your telehealth program and expressing the benefits and outcomes will help patients and families understand the effect the telemedicine program has on the care delivery system within the facility.

Advice to Share with Others

1. When evaluating telehealth platforms, evaluate the features and platform integrations. Platforms with EHR/EMR and medical peripheral integration such as a stethoscope deliver the required clinical and diagnostic information to the remote physician to make informed advanced clinical decisions. Non-integrated telehealth platforms require side-by-side access to the EHR/EMR and may not have a link to the patient, therefore making it difficult to associate the telehealth session to a given patient.

2. Over-complex telehealth carts and specialized equipment will not only impact your budget, but will also affect staff adoption, use, and engagement. Look for solutions that enable mobile devices and work across computing platforms. Easy-to-use telehealth platforms are key to a successful telehealth program.

3. Telehealth has many different use cases in the LTPAC care setting.

    a. *Change in condition management:* Telehealth can be used to gain access to physicians to evaluate patients who have a sudden change in condition.

    b. *Enterprise Care Team Collaboration:* LTPAC organizations that have multiple locations can engage specialists across the enterprise. Wound care and/or any specialty care team members can collaborate using telehealth to improve access to care across the enterprise.

    c. *Referral Management:* Hospital liaisons/sales team members can use telehealth to gain access to facility care team members (DON/Clinical Specialist) to perform a remote evaluation and ultimately approve or deny an admission for open opportunities.

    d. *Medication Education and Review:* Use telehealth to set up programs that will help patients succeed when they discharge. Telehealth can be used to connect patients with the pharmacy to review and educate on medications prior to discharge.