



Telehealth in Post-Acute Care Settings

Overview of market trends, legislative changes, and provider response

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The case for telehealth

Benefits of telehealth programs and their prevalence in the market

The term telehealth refers to a group of technologies and clinical services facilitated by the electronic exchange of medical information. Established telehealth services are divided into three modalities: store and forward, live consultations, and remote monitoring. Use this report to review trends and regulations, and review potential investment considerations.

Key benefits of telehealth

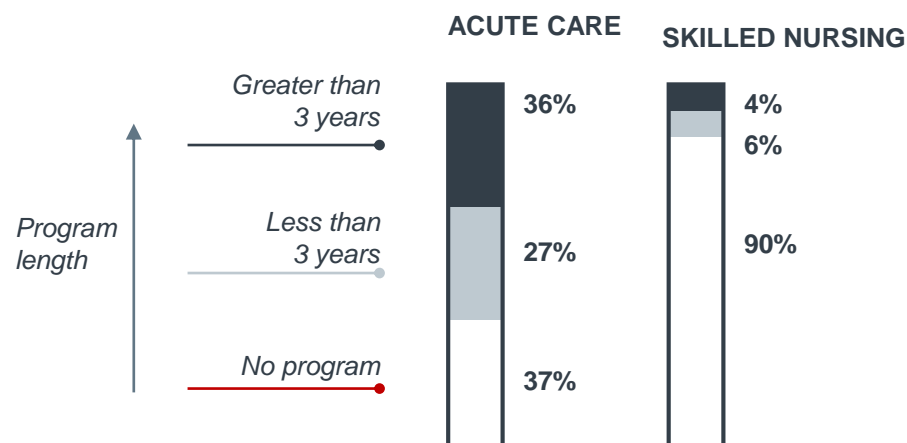
- ▶ **Enhance access:** Increases care team reach and expands served market by treating patients residing in rural areas, and those experiencing difficulty in making it to a physical office, by creating options for virtual consults and other home-based remote care options
- ▶ **Increase quality:** Improves care management by creating opportunity to continuously monitor and manage patients post-discharge, decreasing unnecessary readmissions and ED visits, and allowing patients to remain in the home
- ▶ **Improve provider bottom line:** By allowing patients to stay in the post-acute setting, telehealth improves census and generates revenue, while also lowering costs for the system by decreasing unnecessary utilization

Current telehealth market overview

Data indicates that acute care systems are leading the charge on telehealth implementation overall. Acute care organizations have more total programs, and more mature programs; however, the trend in telehealth growth overall is clear.

Given the continued increase in telehealth volumes and interest from payer and provider executives, there is an opportunity for post-acute providers, and health systems building a post-acute strategy to create a strong telehealth footprint.

Telehealth program maturity in acute care and SNF



Telehealth interest and volumes are growing

28%

Growth in telehealth
Medicare fee-for-service
volumes from 2015-2016

\$28.7M

2016 Medicare Part B
telehealth reimbursements

83%

Industry executives¹
indicated they were likely to
invest in telehealth in 2017

Sources: "2017 U.S. Telemedicine Industry Benchmark Survey," REACH Health, April 2017, <http://reachhealth.com/wp-content/uploads/2017-US-Telemedicine-Industry-Benchmark-Survey-REACH-Health.pdf>; ATA, "Executive Leadership Survey," March 2017, <http://thesource.americantelemed.org/resources/telemedicine-executive-leadership-survey>, Post-Acute Care Collaborative interviews and analysis.

1) Executives refers to leaders across the industry in both acute and post-acute sectors.

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Telehealth payment overview

Medicare reimbursement and other payment mechanisms

Basics of Medicare coverage

Currently, only live virtual interactions and remote monitoring are covered modalities. Participating patients, providers, and institutions must satisfy several additional conditions to be eligible for coverage.

Recent changes to Medicare reimbursement

Recent policy changes have expanded telehealth coverage for some modalities, geographies, and providers.



Medicare's 2018 physician fee schedule:
Included reimbursement for remote patient monitoring



Bipartisan Budget Act of 2018: Reduced geographic and care site restrictions in two-sided risk payment models for specific conditions



Home Health PPS² 2019: Home health agencies (HHAs) will be allowed to bill Medicare for remote patient monitoring services

These policy changes demonstrate a positive regulatory outlook for SNFs and HHAs, in particular, given the coverage expansion for remote monitoring from those originating sites.

Medicare reimbursement criteria

1 Geographic Location of Originating Site

- Site located outside of a Metropolitan Statistical Area (MSA) or in a rural Health Professional Shortage Area
- Medicare fee-for-service beneficiary must be physically present during the time of service

2 Type of Institution Serving as Originating Site

- Office of a physician, practitioner
- Hospital, rural health clinic, or FQHC¹
- Skilled nursing facility
- Hospital-based dialysis center
- Community mental health center

3 Type of Health Provider Delivering Service

- Physician
- Advanced practice provider (NP³, PA⁴, midwife)
- Clinical nurse specialist, psychologist, or social worker
- Registered dietitian or nutrition professional

4 Modality

- Live virtual interaction
- Remote patient monitoring

Considering other payment mechanisms

Despite recent changes, Medicare reimbursement remains limited by originating site and provider type. Other payers, such as Medicare Advantage plans or managed care payers have more discretion over what they chose to cover, and can exercise reimbursement with fewer restrictions. With this in mind, post-acute providers seeking to develop a telehealth offering should consider payment mechanisms beyond traditional Medicare fee-for-service including:



Accountable Care Organizations

- Similar to fee-for-service, waiver permits additional reimbursement



Managed Care Organizations

- May choose to offer telehealth service coverage

1) Federally Qualified Health Center.
2) Prospective Payment System.
3) Nurse Practitioner.
4) Physician's Assistant.

Source: "Final policy, provisions, and quality provisions in the Medicare Physician Fee Schedule for CY 2018," CMS, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2017-Fact-Sheet-items/2017-11-02.html>; "Final policy, provisions, and quality provisions in the Medicare Physician Fee Schedule for CY 2018," CMS, <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2017-Fact-Sheet-items/2017-11-02.html>; CMS, <https://s3.amazonaws.com/public-inspection.federalregister.gov/2018-24145.pdf>; Post-Acute Care Collaborative interviews and analysis.

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Alternative payment mechanisms in action

BAYADA works with a managed care payer for telehealth program

CASE EXAMPLE

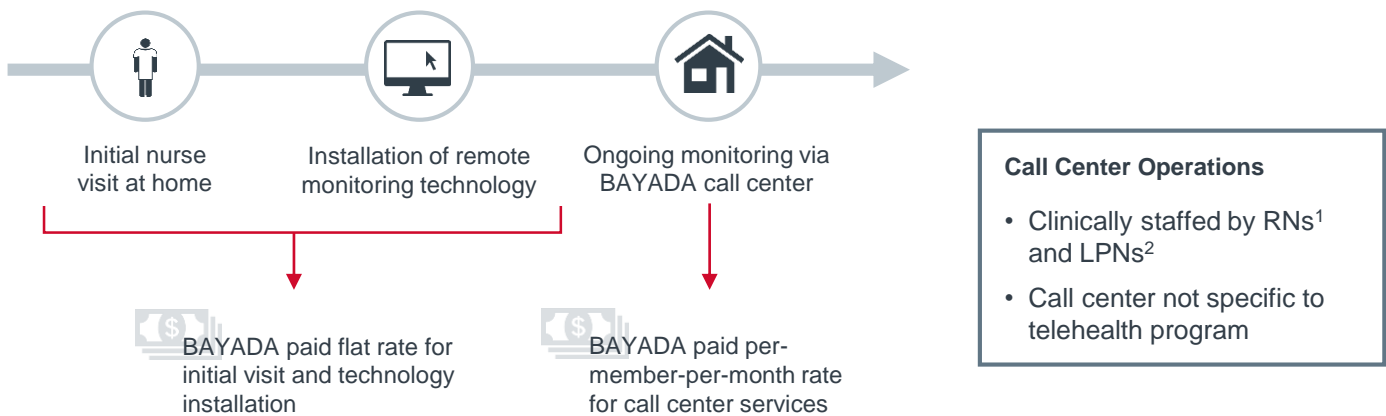
BAYADA Home Health

Home Health Agency • Moorestown, NJ

- BAYADA is a home health agency serving communities in 22 states from 335 offices
- Implemented a telehealth remote monitoring program for heart failure patients in partnership with a managed care payer
- Program operates in 2 markets with a pilot cohort of 45 patients being treated through the program

Program mechanics

BAYADA's program was conceived when a managed care payer reached out to them in order to begin a telehealth offering for heart failure patients, to improve readmissions. Under the agreement, BAYADA is paid by the managed care payer for the full scope of services and activities needed for successful remote monitoring.



Investment and outcomes

This program is set to launch in early 2019 and both BAYADA and their managed care partner will watch results closely in order to determine the appropriate scale of this program in the future.

Goals of the program:

- Reducing readmissions
- Allowing patients to stay safely in the home
- Develop a new skill set in long-term population management



Initial Program Reach

- 45** Initial cohort of patients enrolled in program
- 2** Markets where the pilot program launched




1) Registered Nurse.
2) Licensed Practical Nurse.

Source: BAYADA Home Health Care, Moorestown, NJ; Post-Acute Care Collaborative interviews and analysis.

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Primary telehealth modalities and PAC applications

Overview of modalities, their use case, and potential benefits

 Modality	 Use case example	 Benefits for patients and providers
Live Virtual Interaction Remote, real-time services provided via live videoconferencing; either provider-to-provider or direct-to-patient	SNF nurses set up videoconference between offsite physicians and patients when urgent care is needed	<ul style="list-style-type: none"> • Provides convenient avenue for patients needing routine visits or specialist consults • Enhances provider access for individuals who live in rural areas, or are homebound
Remote Monitoring Real-time transmission of patient biometric or self-reported data to inform care planning or identify need for intervention	Clinician provides remote monitoring device to home health patients in order for clinician to check vitals between visits	<ul style="list-style-type: none"> • Provides clinicians opportunity to initiate key interventions when a status change is observed • Creates additional opportunity for clinical data collection • Helps to reinforce patient self management through virtual reminders
Asynchronous Store and Forward The capture and subsequent transmission of images, test results, or other data to a third party for consultative purposes	Post-acute clinician sends patient's test results to specialist for consultation	<ul style="list-style-type: none"> • Streamlines review of data or test results from off-campus providers through use of online platforms • Creates easier pathway for specialist opinions

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Live virtual interaction keeps patient in-setting

Health plan, provider, and patients see positive outcomes

CASE EXAMPLE

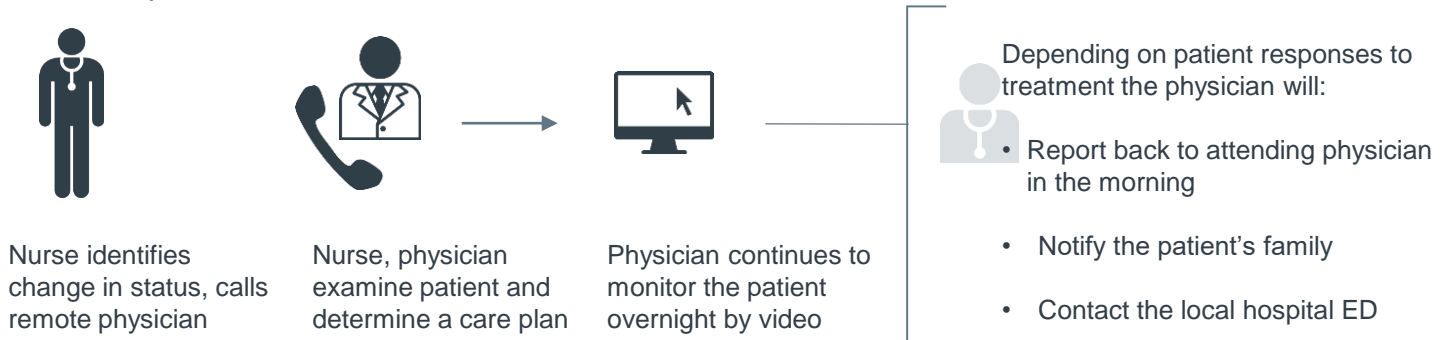
Cobble Hill Health Center

365 bed Skilled Nursing Facility • Brooklyn, NY

- Offered an after-hours telemedicine program through TripleCare, a virtual health vendor, to 313 patients from March 2015 to March 2016
- Of the 313 patients cared for by telemedicine-enabled covering physicians, 259 were able to be treated on-site and at least 91 hospitalizations were avoided
- Program created an estimated savings of \$1.55 million to Medicare, with approximately \$500,000 of that paid directly to a Medicare Advantage payer; Cobble Hill estimated \$20K in net gain for their facility

After hours telehealth program connects at-risk patients to physicians

Cobble Hill's program extends the care team through live virtual interactions over webconferencing, allowing onsite nurses and virtual physicians to work together to monitor patients outside of normal business hours, effectively lowering unnecessary after-hours admissions from the SNF.



Financial outcomes for Cobble Hill from telehealth program

In addition to savings to Medicare and the managed care payer, Cobble Hill also saw strong results from this program

\$60K

Initial investment from Cobble Hill for the technology and services provided

Cost of investment offset by:

- 1 Prevented hospitalizations improving census in short-term rehab
- 2 Decrease in transportation costs due to avoiding unnecessary hospital transfers



\$20K

Estimated net financial gain to Cobble Hill after accounting for initial investment

Source: Chess, D. et al "Impact of After-Hours Telemedicine on Hospitalizations in a Skilled Nursing Facility" <https://www.ajmc.com/journals/issue/2018/2018-vol24-n8/impact-of-afterhours-telemedicine-on-hospitalizations-in-a-skilled-nursing-facility?p=1>; Post-Acute Care Collaborative interviews and analysis.

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Remote monitoring increases patient touchpoints

Program offers improved care management for home health patients

CASE EXAMPLE

Christiana Care Health System

1227 bed health system • Wilmington, DE

- Christiana Care is a health system operating in Delaware and portions of seven counties bordering the state in Pennsylvania, Maryland and New Jersey
- The system includes two hospitals, outpatient services, home health care, medical aid units, a comprehensive stroke center and regional centers of excellence in heart and vascular care, cancer care and women's health
- Christiana Care is piloting a remote monitoring program for heart failure patients being treated by their home health service in partnership with Medtronic




Program mechanics

This telehealth program utilizes a new innovative remote monitoring technology to target a specific intervention for heart failure patients with the goal of preventing unnecessary utilization, and creating savings for the system.

ReDS¹ vest help monitor heart failure patients

- ▶ Non-invasive device, similar to a vest, worn by patients sending information to clinician
- ▶ Measures lung fluid, targeting a complication correlated with unnecessary ED visits
- ▶ Measurement only takes 90 seconds, and patients only wear the vest for measurement

Program aims to improve home health at Christiana

-  Provides ability for swift baseline measurements in any setting for precise remote monitoring comparisons
-  Creates opportunity for additional patient management between home health visits
-  Increases possibility for early intervention and lowers unnecessary ED utilization

Investment and outcomes

Given this program is in a pilot stage at Christiana Care, results on this program have not yet been collected. However, when looking at a study of the ReDS vests and clinical programs, the following can be considered:

Studies outline data on ReDS Vests Clinical Outcomes



87%

Decrease in readmissions from starting use of ReDS vest, compared to patients 3 months prior, without vest use

Metrics Christiana Care will evaluate

- Impact on readmission rate
- ED utilization
- Patient satisfaction

Source: Christiana Care Health System, Wilmington, DE; Amir O, et al., "Evaluation of remote dielectric sensing (ReDS) technology-guided therapy for decreasing heart failure re-hospitalizations," *International Journal of Cardiology*, <https://www.internationaljournalofcardiology.com/action/showFullTextImages?pii=S0167-5273%2816%2932225-2>; Post-Acute Care Collaborative interviews and analysis.

1) Remote Dielectric Sensing.

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Assessing potential telehealth program options

Key considerations to make prior to investment

Challenges and opportunities to weigh prior to program development

Prior to developing a telehealth offering, organizations must consider the business case for their program, balancing both the challenges and opportunities associated with telehealth:

Challenges



Investment: Creating a telehealth offering is often challenging due to the financial costs and training involved



Reimbursement: Medicare fee-for-service reimbursement is limited based on location and other factors

Opportunities



Improved outcomes: Telehealth can expand access to care, and improve ongoing management of high-risk patients



New partnerships: By helping to treat patients in most cost-efficient setting both hospitals and PAC see benefit

Investment considerations by modality



Live virtual interaction



Remote monitoring



Asynchronous store and forward

Financial

Costs include technology necessary for web conferencing, and any additional software

Costs for each remote monitoring device for patients, and any necessary software

Additional technology may not be needed, if existing EMR satisfies requirements

Operational

Additional clinicians may be needed for virtual visits; clinicians must be trained for new technology

Patients and clinicians may need training to understand the new monitoring technology

Clinicians may need to build new tasks into their current workflow

Cultural

Patients may have discomfort for a variety of reasons such as clinical quality, lack of trust, etc.

Patients must be able and willing to use the remote monitoring device properly

Clinicians may feel that this is an unnecessary addition to their workflow

Source: Post-Acute Care Collaborative interviews and analysis.

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