Integrating Technology into Home Health Care Delivery: Examples of Several Innovations and How They Work in Practice

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VNA HealthGroup

Overview

1. Discuss new applications and technology being tested and deployed in a home health care agency
2. Understanding the challenges in deploying an application in a home health setting
3. Measuring the value of the application from the patient and clinician perspectives

VNA Health Group

- Largest visiting nurse association in NJ
- 2nd Largest independent VNA in the Country
- 120,000 individuals & families receive care & services annually
- 7,000 patients are cared for on any given day at home
- Statewide practice

Connected Health Institute Focus

Identify, test and implement technology that helps clinicians and family caregivers keep patients safely at home and in their communities.

Improve communications among clinicians
Piloting and integrating video visits into care delivery
Implement state of the art remote patient monitoring
Implement technology to improve patient engagement, reach, testing, web and other virtual forms of communication
Implement digital wound management
Implement analytics for better reporting, analytics and decision support
Discussions with EMR companies about building the next generation platform

Connected Health Institute Advisory Board

Our **CHI Advisory Board** is comprised of clinicians, technologists, entrepreneurs, developers and business leaders representing:

Microsoft, capsco, Mayo Clinic, Palantir, Mercedes-Benz Vans, Cleveland Clinic Innovations, Center for Healthcare Quality, Health Dialog, pulsetile, Rx Barrabas, Cognizant, Sonus, Health Care Transformation Institute, ALLIED, Telehealth Consulting, Verizon Wireless

Our Model

Discovery → Pilot → Implementation

Process

- Discovery
  - Identify Needs
  - Vendor Search
  - Conferences
  - Organization Outreach
- Pilots
  - Small scale testing
  - 3 to 12 months
  - Data collecting and Analysis
- Implementation
  - Value Demonstrated
  - Technology Integration
  - Rollout across the organization

Evaluation Measures

- Patient outcomes
- Patient engagement
- Patient use of whether technology fits into clinical workflows
- Ease of use
  - Patient
  - Clinician
- Reliable of the technology

Example s

Traditional Remote Monitoring

LumiraDX

Clinician and Patient App

Monitoring Devices Shipped to Patient

Cardiac Monitor

Telehealth Dashboard

Telehealth Services / Patient Survey

Patient comments
"I feel better because I know someone is watching over me."
"I feel better because I know someone is checking on me and I can talk to someone if I need to."
"I feel better because I know someone is checking on me and I can talk to someone if I need to."

Nurses' Ratings of the Monitors

Patient Application

Objectives

- Demonstrate the value of mobile application platform in certified home health environment by:
  - Enhancing patient engagement through the use of patient education
  - Increase patient satisfaction
  - Ease communication with clinicians by utilizing messaging
  - Expanding the productivity of clinicians by utilizing video calls vs. in-house visits when appropriate

Specific Measures

- Utilization of the software
- Patient satisfaction survey at discharge
- Nursing and Therapist visits per patient

Key Modules

Patient Platform

83% of registered patients actively used the platform

What were the most popular modules?

Patient Survey Results (Preliminary Data)

	Sep - May 2017	Change Prepare 3 Prepare 3 Total	Change Prepare 3 Sample Total
1	Using Medocity Home Health made it easier for me to contact and communicate with my nurse/ doctor	4.6	4.6
2	The program has made me feel better about managing my health	4.5	4.5
3	Using Medocity Home Health was helpful to me in my recovery	4.6	4.6
4	I would recommend Medocity Home Health to other patients with my condition	4.6	4.6
5	Using Medocity Home Health allowed me to stay at home and avoid the hospital or nursing home	4.6	4.6
6	I expect I would not miss this, but were it not in my home, I would miss it	4.6	4.6
7	Medocity Home Health has been very helpful in managing my health	4.6	4.6
8	Medocity was a valuable tool that helped me recovery 3 month Prepare Pilot	4.6	4.6
9	My overall rating of the care provided by VNA Health Group is Very Satisfied or Satisfied	4.6	4.6
10	I would give Medocity Home Health a 9 or 10 (out of 10)	4.6	4.6

Patient Survey Results (Continued)

Q11: Please share any additional thoughts and opinions regarding the Medocity Home Health platform

It's very easy to use to manage my care. I think all VNA clinical staff should be using this technology with their patients.

Being able to send my nurse a picture of my wound was very helpful. There was a problem initially with her being able to view the picture. I contacted the tech support and they fixed the problem. Being able to send her a picture allowed me to be advanced up in weight.

Would like different questions asked. Sometimes the questions asked for a response are not applicable to what I'm trying report

Platform Usage: Nurse

After training, 36% of nurses had active participation in the platform

What were the most popular Nurse modules?

Platform Usage: Nurse Alerts

In Addition to Messaging, Medocity allows Home Nurses to interact with patients between visits

Alerts are triggered when patients reported symptoms through Health Tracker questions sets

60% of patients generated alerts

Clinician Survey Results

	Sep - May 2017	Change Prepare 3	Prepare 3 Total	Change Prepare 3 Sample Total
1	Using Medocity Home Health made it easier for me to contact and communicate with my patients		4.5	4.5
2	Using Medocity Home Health made it easier for me to contact and communicate with my home health aide		4.5	4.5
3	Using Medocity Home Health allowed me to stay in my patient's home		4.5	4.5
4	Using Medocity Home Health was helpful to me in my recovery		4.5	4.5
5	I would recommend Medocity Home Health to other patients with my condition		4.5	4.5
6	Using Medocity Home Health allowed me to stay at home and avoid the hospital or nursing home		4.5	4.5
7	I expect I would not miss this, but were it not in my home, I would miss it		4.5	4.5
8	Medocity was a valuable tool that helped me recovery 3 month Prepare Pilot		4.5	4.5
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10	I would give Medocity Home Health a 9 or 10 (out of 10)		4.5	4.5

Clinician Survey Results (Continued)

Q11: What do you like most about Medocity Home Health?
Ease of communication with patients
Communication with patients
What do you like least about Medocity Home Health?
Time it takes to enter information into the patient's unit at it - need a better program.

Q12: What does not seem to work well for you using Medocity Home Health which prevents you from using it more?
Second opinions when I spoke to others using Medocity decided not to utilize the program. Time it takes to enter information into the EMR - there is no seamless interface.
Waiting for an answer.

Q13: Were could Medocity Home Health be better integrated into the care delivery process?
No, it's all in reference [illegible]

Enrollment Steps and Findings

Enrollment Steps	Challenges	Solutions
Identify patients appropriate for the program, obtain consent, and enroll in the program	Low enrollment rates - many were not using the technology, lack of interest, not feeling well enough, not wanting to be bothered	Change the criteria, change the consent process, change the technology