

As part of DSRIP Project 2.b.viii, home health organizations in the AHI PPS were invited to complete the Telehealth Implementation Survey. Data for the survey was collected during March 2016. The survey was designed to assess baseline implementation issues: program scope and scale, types of technologies being used, clinician training patterns and program impact. Criteria for participation in the survey were home health organizations currently engaging in telehealth practices. Of the 15 home health organizations in the AHI PPS, seven were identified as currently engaged in telehealth supported services, and five completed the survey. 19 items were included on the survey, which was administered online via survey monkey. The survey response rate was 100%, across the five surveys there was very little missing data, and only a single data point was missing on each of the remaining surveys.

Findings:

Years Engaged in Telehealth:

Of the AHI PPS home health organizations currently engaged in telehealth, four out of five report using telehealth technologies for *more than five years*. One organization reported their involvement in telehealth as *less than 12 months*. For the four home health organizations engaged in telehealth for more than five years, three report they have grown the program (i.e. number of units in program has increased), while one organization reported having fewer units in year five than year one. Annual cost of telehealth technologies varied widely across the five home health organizations. Two organizations reported annual costs at \$100,000 +,

Q2. How long has your organization been involved in using telehealth technologies?

Answer Options	Count
more than 5 years	4
3 to 5 years	0
1 to 2 years	0
less than 12 months	1
just purchased the system within last 90 days	0

another two reported annual costs at <\$10,000 and a single organization reported annual cost at \$51,000 - \$75,000. To better understand the variation in annual cost across organizations it would be worth exploring the type of technology and type of contract home health have respective of their telehealth equipment (example lease, lease to own, etc.)

The Technology:

Four out of five organizations surveyed report using peripheral devices with their telehealth units. Of the four organizations reporting use of peripheral devices, blood pressure cuff, scales and O2 saturation test were used by all four, glucometer was used by two of the four, and thermometers were used by one of the four. Telehealth peripheral devices **not used** include PT/INR testing, peak flow meter, and ECG. A single home health organization reported *no attachments used* and indicated their telehealth platform was *telephony* which does not support peripheral devices. Data from earlier telehealth interviews

Q6. Which of the following peripheral devices do you use with your telehealth units? (check all that apply)

Answer Options	Count
BP cuff	4
Thermometer	1
Scale	4
Glucometer	2
PT/INR testing	0
Peak Flow meter	0
ECG	0
O2 saturation test	4
attached stethoscope	0
no attachments used	1
Comments	1

indicate that home health telehealth programs largely serve clients with the following chronic disease profile; heart disease (congestive heart failure), chronic obstructive pulmonary disease, and diabetes. Only one home health organization reported maintenance issues which they attributed to normal wear and tear. Finally, when asked if telehealth systems had been customized, two of the five health homes report **no customization** to the system, and one home health reported their *entire service* is customized via the vendor.

Activities Accomplished via Telehealth System:

Home health organizations report accomplishing a number of activities related to their telehealth based services. All five home health organizations have been able to develop criteria for use/identify best patients for telehealth. Four out of five organizations report they have trained clinicians, use telehealth for a specific diagnosis, integrate telehealth with other systems (clinical, financial), incorporate telehealth in marketing strategy, and use telehealth data in liaison/physician relations activities.

Q7. Which of the following activities have you been able to accomplish with your telehealth system? (check all that apply)

Answer Options	Count
implement system/deploy units	3
develop criteria for use/identify best patients for telehealth	5
train clinicians	4
use telehealth for specific diagnoses	4
use telehealth on all patients/consumers regardless of diagnosis	1
integrate telehealth into clinical pathways	3
expand telehealth beyond RNs (to include PTs, aids or health coaches)	0
add new peripheral devices (stethoscope, ECG testing etc.)	0
integrate telehealth with other systems (clinical, financial)	4
establish telehealth partnerships with other providers (SNF, specialty care etc.)	0
track outcomes for telehealth patients/consumers	3
incorporate telehealth in marketing strategy	4
use telehealth data in liaison/physician relations activities	4
develop telehealth training process for patients/consumers	3
Comments	2

Three out of five report accomplishing the following activities: implement system/deploy units, integrate telehealth into clinical pathways, track outcomes for telehealth patients/consumers and develop telehealth training process for patients/consumers. Only one organization reported using *telehealth on all patients/consumers regardless of diagnosis*. Activities **not accomplished** by any of the five home health organizations include expanding telehealth beyond RNs (to include PTs, aids or health coaches), add new peripheral devices (stethoscope, ECG testing etc.), or establish telehealth partnerships with other providers (SNF, specialty care).

Outcomes Achieved:

Home health organizations were asked to rate outcomes “in the order they have improved as a result of implementing telehealth processes”. Only two of the five organizations completed this question in full, the remaining three organizations had several missing data points. Given the high rate of missing data in this question, the summary data (rating average) is not valid. Given the varied chronic disease states home health organizations address it would be useful to understand this question as it relates to specific disease states and severity levels. Future iterations of this survey should look to clarify both the question being asked and the scale being used (i.e. rate 1 to 9 with 1 being the most improved and 9 the least improved).

Q12. Rate the payoff of your telehealth system, rank the following items in the order they have improved as a result of implementing telehealth processes.

Answer Options	Rating Average	Count
reduced visits	1.75	4
reduced travel costs	4.5	2
improved outcomes	3	3
fewer re-hospitalizations	4	4
lower per episode costs	3	2
increased referrals	6.67	3
improved reporting	5.2	5
improved staff morale/retention	8.67	3
higher patient/consumer satisfaction	4.2	5

Concerns with Telehealth Systems:

Home health organizations shared a number of concerns related to using telehealth technologies including lack of connectivity (i.e. broadband), lack of reimbursement (funding), lack of electronic medical record/limited or no ability for documentation, better analytics, and need for physician collaboration. When asked about functionality they hoped would be part of telehealth systems, but was not, *more extensive documentation of patient condition and better analytics were again noted*. One home health organization reported wanting access to a *peak flow meter*. Two of the five home health organizations report lack of broadband as having an impact on their ability to implement services via telehealth.

Clinician Training:

When asked to rate their clinician's proficiency (knowledge, speed, accuracy, comfort) with telehealth technologies, three home health organizations reported average, and two reported excellent. Three organizations provided *orientation only* training, on an as needed only basis, and semi-annually were each reported singly by the remaining two organizations.

Summary

Feedback from the Home Health-Telehealth Implementation Survey provides a baseline for which home health organizations in the AHI PPS are currently engaging in services provided via telehealth. While most organizations report being engaged in telehealth services for more than five years, the limited number of peripheral devices being used and the concerns/limitations of these current systems suggest there are opportunities to improve and expand programs.

Information gathered from this survey is integral for developing and incorporating a regional telehealth implementation initiative that will help reduce the risk of re-hospitalizations for high risk patients in the AHI PPS. Improving and expanding upon current telehealth programs will help decrease the risk of missed provider appointments, allow for more frequent patient observation by medical staff, increase compliance with discharge regimens, and inform other AHI PPS health initiatives, such as increasing access to palliative care programs.