Telehealth Lunch & Learn Webinar Series

Enhancing Patient Involvement in Telehealth: Readiness, Engagement, and Adherence

October 9, 2018
Telehealth – Patient Involvement

Lessons learned regarding selection, adoption and use of Telehealth

Presented by:

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• Leana Hoover, MSN, NHA, Director of Elder Medical Care
Purpose:

Demonstrate the impact of telehealth technology ("project") in supporting value-based care delivery in primary care through expanding access to health services and addressing the needs of different patient population.

Patients with multiple co-morbidities were selected for this intervention.
Patient Selection Flow Chart for Telehealth Pilot

Patient Admitted to Elder Medical Care Home Services Program

- Is the patient willing to utilize telehealth equipment?
  - No
    - Stop
  - Yes
    - Does patient have internet connectivity?
      - No
        - Stop
      - Yes
        - Patient and/or Family Consent to utilize telehealth obtained?
          - No
            - Stop
          - Yes
            - Complete Medical & Home Evaluations
Telehealth Patient Screening Tool

Patient name: ___________________________ DOB: ______________________

Responsible party: _______________________ Contact: ______________________

Interest in telehealth program: YES NO

Internet Access: YES NO Internet provider: ________________________________

Passwords Available: YES NO

Diagnosis/Reason for Tele-Health Monitoring/participation:
________________________________________________________________________
________________________________________________________________________

Circle the type of monitoring needed for patient: and indicate alert range: frequency

Weight Loss Gain Pounds _____ Freq _____

Systolic BP < _______ > _______ QD BID TID other

Diastolic BP < _______ > _______

Glucose < _______ > _______ QD BID TID AC HS

Oxygen Saturation < _______ > _______ QD BID TID QID other _______

Thermometer ___________ Route ___________ Freq ___________

Motion Detector Yes No Define:

Environmental Aids: Yes No Define:

Additional information needed before set-up or in home visit: Face Sheet, MOLST, Visit Note, Med list
Telehealth Patient Screening Tool:

• The tool was developed with the Gilchrist Elder Medical team (RN case manager and Nurse Practitioners) and the nurses monitoring the telehealth devices.

• Purpose of the tool was to allow for structure and parameters for notification of the clinician (NP or MD) when a reading was out of range.

• Any reading triggering an “alert” notified the monitoring nurse to call the patient and investigate further (i.e., how was the patient feeling, had meds been taken yet, etc.)

• Reporting parameters could be adjusted as needed by the ordering clinician.
Patient: J.W.

56 year old male with multiple chronic disease states and medications:
- Pertinent PMH: Depression, Chronic pain, Chrohn’s disease
- Number of medications: 13 medications

<table>
<thead>
<tr>
<th>Utilization of Telehealth</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deescalating cardiovascular medications</td>
<td>• Trend vitals results</td>
</tr>
<tr>
<td></td>
<td>• Titrate medications accordingly to discontinue</td>
</tr>
<tr>
<td>Reassessment of medical condition</td>
<td>• Past diabetes diagnosis and current glucose logs</td>
</tr>
<tr>
<td></td>
<td>• Reconciliation with A1c to determine proper disease classification and/or diagnosis</td>
</tr>
<tr>
<td>Potential Use: Measurement Tools</td>
<td>• Potential ability to have patients conduct self assessment with use of validated monitoring tools</td>
</tr>
<tr>
<td></td>
<td>• E.g. PHQ9 Score</td>
</tr>
</tbody>
</table>
81 year old male with multiple chronic disease states and medications:

- Pertinent PMH: HTN, Atrial fibrillation, DVT, PVD, and Neuropathy
- Number of medications: 11 medications

<table>
<thead>
<tr>
<th>Utilization of Telehealth</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular monitoring</td>
<td>• Trend vitals results</td>
</tr>
<tr>
<td></td>
<td>• Assess if meeting goals of therapy</td>
</tr>
<tr>
<td></td>
<td>• Titrate medications accordingly</td>
</tr>
<tr>
<td>Medication adherence</td>
<td>• Medication reminders</td>
</tr>
<tr>
<td>Patient Empowerment</td>
<td>• Allows patient to feel empowered to manage own health condition</td>
</tr>
<tr>
<td>Potential Use: Review Wellness reports within the Grand Care monitor with other home health providers</td>
<td>• Potential ability to communicate between various home health providers who may not be part of the same health-systems through documentation in Telehealth</td>
</tr>
</tbody>
</table>
Telehealth Impact – Gilchrist’s Perspective

Care delivery

• Enabled Gilchrist providers to work with interdisciplinary team (Gilchrist, Nurses, Pharmacy, Service coordinators, Provider-NP) to make informed/objective decisions in daily medical care (BP med titration, diabetic regimens) within days-week vs. week-months, producing better outcomes

• Risk Assessment Scores – enabled medication de-prescribing, decreased hospital stays- better managed patients overall decreasing their risk of re-admission

Efficiency

• Allowed for alternate method of assessment by way of video chat, care logs to communicate patient needs, therefore using the Provider’s time more efficiently
## Patient Satisfaction Survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nurse Practitioner</strong></td>
<td></td>
</tr>
<tr>
<td>Timeliness of visit</td>
<td>4.9</td>
</tr>
<tr>
<td>Responsiveness to calls</td>
<td>4.9</td>
</tr>
<tr>
<td>Courtesy of Nurse Practitioner</td>
<td>5.0</td>
</tr>
<tr>
<td>Purpose for the visit explained</td>
<td>5.0</td>
</tr>
<tr>
<td>Clinical Knowledge</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>RN Case Manager</strong></td>
<td></td>
</tr>
<tr>
<td>Courtesy of Case Manager</td>
<td>5.0</td>
</tr>
<tr>
<td>Responsiveness to calls</td>
<td>4.9</td>
</tr>
<tr>
<td>Helpfulness of community resources provided for you</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>Telehealth</strong></td>
<td></td>
</tr>
<tr>
<td>Enhances ability to take care of myself</td>
<td>4.9</td>
</tr>
<tr>
<td>Enhances my ability to interact with others</td>
<td>4.4</td>
</tr>
<tr>
<td>Telehealth equipment is easy to learn</td>
<td>4.5</td>
</tr>
<tr>
<td>Telehealth equipment is easy to use</td>
<td>4.5</td>
</tr>
<tr>
<td>Quality of information I get is high</td>
<td>4.9</td>
</tr>
<tr>
<td>The benefits are apparent to me</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td></td>
</tr>
<tr>
<td>Overall satisfaction with program</td>
<td>5.0</td>
</tr>
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</table>

- 30-day survey based on 19 patients within the telehealth program
- Survey scores based on a scale of 1-5
Patient Satisfaction Survey

Comments

“Glad I was selected to take part in the program”
“The telehealth is great”
“You are all like angels”
“I appreciate everything you guys have done for us. I love you all.”
“We love Support Our Elders program and the telehealth access!”

“I still need help”
“Is difficult to use due to lack of feeling in hand and unavailability to get help”
THANK YOU
Individual Differences in Effectiveness of an mHealth Trial

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Overview

• Introduce mHealth approaches to T2D
• Present DiaSocial trial
• Discuss implementation and feasibility from provider perspective
T2D

• Healthy behavior core of treatment
• Self-management education
  • Structured
  • Cost effective
  • Widely available
  • Evidence based
• Different approaches to treatment
mHealth

• Low cost
• Improves communication with care team
• Personalized ‘coaching’
• Improves glycemic control¹
  • Effect size 0.5-1% reduction in HbA1c
  • Younger patients benefit more
    • 14 studies, ~1600 patients
• But still some inconsistency in findings²
  • Might work better for some than others

¹Hou et al 2016 Diabetes Care; ²Hamine et al 2015 JMIR
DiaSocial Pilot Study

• Implemented with older VHA patients
• 13-wk tablet-based intervention
• Included social and gamification features
  • In-person training and meeting
• Patients completed baseline survey
  • Regulatory mode orientations
• Targeted management of diet, exercise, and glucose self-monitoring
• HbA1c as primary outcome
DiaSocial App

<table>
<thead>
<tr>
<th>Name</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>27</td>
<td>25</td>
<td>27</td>
<td>27</td>
<td>25</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>Exercise</td>
<td>25</td>
<td>30</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Medication</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>Nutrition</td>
<td>45</td>
<td>34</td>
<td>45</td>
<td>34</td>
<td>34</td>
<td>35</td>
<td>0</td>
</tr>
</tbody>
</table>

Legend:
- Expected Goal
- Met Goal
- Exceed Goal
- Miss Goal

Image: DiaSocial App interface showing patient data for a week.
Regulatory Mode

• Two distinct motivational orientations

• Locomotion
  • “Just do it”

• Assessment
  • “Do it right”

• Measured with modified 6-item scales

3Kruglanski et al 2000 JSPS
## Regulatory Mode Scale Items

<table>
<thead>
<tr>
<th>Locomotion Items</th>
<th>Assessment Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel excited just before I am about to reach a goal.</td>
<td>1. I never evaluate my social interactions with others after they occur. (R)</td>
</tr>
<tr>
<td>2. I enjoy actively doing things, more than just watching and observing.</td>
<td>2. I spend a great deal of time taking inventory of my positive and negative characteristics.</td>
</tr>
<tr>
<td>3. I am a “doer”.</td>
<td>3. I like evaluating other people’s plans.</td>
</tr>
<tr>
<td>4. When I decide to do something, I can’t wait to get started.</td>
<td>4. I often compare myself with other people.</td>
</tr>
<tr>
<td>5. I am a “low energy” person. (R)</td>
<td>5. I often critique work done by myself or others.</td>
</tr>
<tr>
<td>6. Most of the time my thoughts are occupied with the task I wish to accomplish.</td>
<td>6. I am a critical person.</td>
</tr>
</tbody>
</table>
Regulatory Mode and Adherence

- High assessment – improved adherence
- Low assessment – decreased adherence
- Locomotion – higher adherence early, trend down latter half of study
Change in HbA1c

- Better outcomes for people who used the app more
Clinician Observations

• Older adults willing to learn new technology
• Finding ways to maintain interest critical
• Still untapped differences in preferences
Implementation Potential and Challenges

• Standardization
• Personalization
• Integration with health care system
• Payment/reimbursement
• Still need for large randomized trials
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