Perception & Use of Integrated Telehealth Care among Home Health Care Agencies: A National Survey

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Agenda

• New UPENN-NAHC Collaborative Survey
  o Purpose
  o Content
  o Background
• Participation in the Survey
• Q&A
Study Questions

- What are the characteristics of homecare agencies that adopt telehealth for chronic disease and/or depression care, compared to non-adopters?

- What are the relationships between HHC staff perceptions of telehealth, organizational culture, and intention to use telehealth?

- What are the perceived barriers and facilitators to adopting telehealth?

- What are staff experiences using telehealth?

- What are some recommendations for telehealth adoption?
Study Methods

Online National Survey (Random Sample)  Brief Phone Interview
Online Survey

- Agency Director & Staff Nurse
- Approx. 15 minutes
- 28-32 Questions
- Themes:
  - Perceived Usefulness
  - Ease of Use
  - Work Influences
  - Organizational Factors
  - Innovation Culture
  - Current Use
  - Intention to Use

<table>
<thead>
<tr>
<th>Theme</th>
<th>Definition</th>
<th>Example Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Usefulness</td>
<td>The degree to which each home care staff member believes using telehealth assist their job</td>
<td>Telehealth is useful for chronic illness</td>
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<tr>
<td>Ease of Use</td>
<td>The degree to which each home care agency staff believes telehealth requires low effort</td>
<td>Telehealth makes my job more interesting than in-home service delivery</td>
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<tr>
<td>Work Influences</td>
<td>The influence of others (e.g. managerial staff, patients) on the home care agency staff</td>
<td>People who influence my behavior at work think that it is good to use telehealth for chronically ill patients</td>
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<tr>
<td>Organizational Factors</td>
<td>size, location, budget, legal status</td>
<td>What is your agency’s type?  Rehab, Hospital, Community-based program</td>
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<td>Innovation Culture</td>
<td>The degree to which each staff perceives the agency as supportive of innovation and is equipped with the environment to implement telehealth</td>
<td>My agency has metrics to measure the effectiveness of our innovation initiatives</td>
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<td>Current Use</td>
<td>The number of days &amp; types of telehealth each staff has provided over the past 30 days</td>
<td>Looking back over the previous 30 days, what telehealth services have your provided for your patients?</td>
</tr>
<tr>
<td>Intention to Use</td>
<td>The strength of each staff's intention to use or continue use telehealth in next 6 months.</td>
<td>I anticipate that my agency will use telehealth over the next 6 months for chronically ill patients</td>
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**Telephone Interview**

- Agency Director & Staff Nurse
- Approx. 30~45 minutes
- 10 Questions
- Themes:
  - Perceived barriers & facilitators
  - Telehealth use experiences
  - Training Needs
  - Recommendations for adoption
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<td>Perceived Barriers &amp; Facilitators</td>
<td>What do you believe are some of the barriers and facilitators to adopting and using telehealth services for patient care?</td>
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<tr>
<td>Telehealth Use Experiences</td>
<td>What has been your/your agency’s experience in caring for patients with chronic illness and/or depression using telehealth?</td>
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<tr>
<td>Training Needs</td>
<td>What role did/does training play in the telehealth program?</td>
</tr>
<tr>
<td>Recommendations for Adoption</td>
<td>What are some policy and strategy recommendations that you would give to promote telehealth adoption and uses among home care agencies?</td>
</tr>
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**Participant Selection**

N= 380 Agencies / 760 Staff

![Map of the United States with states labeled and various icons representing different roles such as Director, Staff, and Nurse. The map includes regions like West, Midwest, and Northeast, with specific states highlighted. A mark indicates the average number of agencies N=43.](attachment:participant_selection.png)
Recent Small Study

- 72 Agency directors & 13 Staff nurses
- Pennsylvania Homecare Association
- Online survey
- Objectives:
  - Explore patterns of telehealth care utilization by home care agencies for chronic disease and depression
  - Identify perceived barriers to utilizing telehealth
  - Determine strategies that could encourage adoption of telehealth
  - Validate the survey items

Study Findings
Study Findings

- On average, there were positive perceptions toward telehealth and innovation culture.
- 90.7% perceived Telehealth as useful for chronic illness while 53% did for depression.
- Perceived usefulness, ease of use, facilitating factors & work influences were significantly related with their intention to use.
- Innovation culture was significantly related with facilitating factors and work influences.

Research Gaps

- Existing research mostly focus on patient’s utilization and perceptions of telehealth & physical health, and for a specific technology.
- Adoption of telehealth at the provider level is not extensively explored.
- Existing studies are based on a small sample and/or one setting.
- Need for a representative sample & focus on the direct service providers.
Background

Why this study matters?

Figure 3. Multiple chronic conditions among Medicare fee-for-service beneficiaries, 2010

* Chronic obstructive pulmonary disease.

• 1 in 10 Adults
• Top 3 workplace issues
• Cause of over 2/3 of the reported suicides in the U.S. annually
• The suicide rate for older adults is more than 50% higher than the rate for the nation.
• Up to 2/3 of older adult suicides are attributed to untreated or misdiagnosed depression (American Society on Aging)

Depression & Medical Conditions

• Cancer: 25% (NIMH, 2002)
• Strokes: 10-27%
• Heart Attacks: 1 in 3 survivors
• HIV: 1 in 3 patients
• Parkinson’s Disease: 50%
Chronic Disease & Depression

- 12~16% among home healthcare patients
- Increased functional disability & falls
- Increased hospitalization
- Decreased quality of life
- High medical costs (Gellis, 2010)

Depression Treatments

- Antidepressant
- Supportive counseling
- Therapy (e.g. Cognitive Behavioral Therapy, Problem Solving Therapy, Interpersonal Therapy)
- Support Groups
A Systematic Review of the Effectiveness of Telehealth Interventions on Mental Health Outcomes Among Older Adults (In preparation)

- Interventions are more effective than the usual care home-based services in improving...
  - Depression
  - Anxiety/Distress
  - Quality of life
  - Self-efficacy in disease management
Telehealth as Integrated Care

- 12,200 home health agencies
- Approximately 4,742,500 patients
- Average of 94 annual use
- 76.1%-Medicare & Medicaid-certified
- 22.5%-Medicare-certified
- 1.4%-Medicaid-certified
- Provides services including:
  - Social work services
  - Therapies (physical, occupational, speech)
  - Skilled nursing or nursing
  - Pharmacy or pharmacist services
  - Hospice

Home Health Care

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Home Health Care & Telehealth

- 20~27% reported adopting telehealth for chronic disease management
- No organized data on use for especially for depression care
- Increases in the shortage of mental health services particularly for older adults in the community
- Increases in the number of older adults needing those services

Roles of Service Providers

- Service providers (e.g. social worker and nurses) are gatekeepers.
Implications

- Inform the level of uses of telehealth for chronic disease and depression care.
- Understand the perceived barriers to utilizing telehealth care by the home health care agency staff.
- Help develop strategies that encourage adoption of telehealth among home health care agencies.

Participation in the Survey

Dear Director ____,

You and direct service professionals at your agency have been selected to participate in a national survey. Within this week you will receive an email with the link to the survey. It will be greatly appreciated if you would complete the survey and forward it to your direct service professional.
Dear Director_________,

We are writing to request your participation in a survey study focused on Telehealth use among homecare agencies. This study is supported and in partnership with the NAHC.

Please click on the link below to complete the brief survey. In advance, thank you for your time and consideration!

Follow this link to the Survey: Take the Survey
Or copy and paste the URL below into your internet browser:
https://upenn.co1.qualtrics.com/SE/?SID=SV_822RW1YLJkmmBYF&Preview=Survey&_c=1

Sincerely,
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Grace Kim Ph.D. Student eunhaek@sp2.upenn.edu
University of Pennsylvania, School of Social Policy & Practice

- Only aggregate data will be collected (e.g. no individual identifying data)
- Survey is anonymous and confidential
- All data will be saved on the computers that will be password-protected and securely locked at the office located at the building that will be accessible by the university ID with a prior approval from the university.
- Risks will be minimal for involvement in the study and participants will be able to choose to skip questions.
COLLABORATION

To be launched in 2015 January!