Using Apps & Other Technologies to Support Physical Health in Behavioral Health Settings

November 19, 2015

Pam Pietruszewski, National Council for Behavioral Health
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Housekeeping

How to participate

- Dial the conference by selecting “Use Telephone” in your Audio window. See example
- Submit your text question using the Questions pane
- **Note:** A copy of this presentation and the recording will be made available within 48 hours
Expand use of technology in community behavioral health to monitor diabetes & hypertension in people receiving mental health/addiction services
• 19 participating organizations, 165 clients
• Coaching calls, webinars, work plans
• Tracking health indicators such as:
  – BMI
  – HbA1c
  – Blood pressure
  – Physical activity
  – Nutrition
  – Mood
What Did We Learn?

Recruiting Technology Users

Enhancing Care Delivery
Recruiting Technology Users

- Refurbished phones
- Tablets
- WiFi
- Champions
- Staff meetings
- Flyers, talking points
Enhancing Care Delivery

- Wellness groups
- Verbal reports / discussions
- Emailing/uploading information
- App review
- Reports, handouts, visual aids
Polling Question

Which best describes your organization when it comes to using health apps in care delivery?

a. Brand new idea
b. Familiar but haven’t implemented yet
c. Have just started implementing
d. Have been using apps in our health setting for a while
People and Innovation

- People differ in reactions and receptivity to change.
- People can resist one change but be very interested in another.
- Different changes may elicit different patterns of response.
He tried to hold back the blades of change.
What Attracts Us to Change?

• It saves time or money
• It’s easier to do
• It allows more autonomy or choice
• It enhances image/reputation
• It appeals to one’s values
• It improves quality or safety
What Will Be?
When Technology Meets Health: Technology for Health Group

November 19, 2015

Presented By: Andrea Che, Ph.D.
Asian Americans for Community Involvement (AACI)
San Jose, CA
Technology for Health Group : Core Team

Lindsay Ip, Psy.D.          Andrea Che, Ph.D.          Celia Liu, M.S., M.A.

Sophia Cheng, LVN          Billy Chan, B.B.S.
Why: Technology for Health group was created to provide patients with a more convenient way to track and monitor their management of chronic health symptoms.

Who: Adult patients with diabetes and hypertension from registry. Some patients have behavioral health diagnoses.

What: Mobile phone app used: Tactio Health

Where: Current patients at AACI recruited in person, mail, phone

When: Between January to June 2015; 6 week group
Group Flyers – English and Mandarin Versions

English:

**AACI Technology for Health Group**

**Do You Have Hypertension or Diabetes?**

Free 6-week group to learn about mobile health apps to improve your physical and mental health

- Track your exercise and mood
- Health outcomes monitored
- Communicate with your healthcare team
- Learn behavioral and stress management skills
- Play fun games to improve cognitive skills
- Group support and accountability

**Tuesdays 10-11am, Jan 20-Feb 24**

AACI Room 217

Refreshments will be provided

Sophia Cheng
408-975-2730 (x384)

Lindsay Ip, PsyD, Andrea Cho, PhD, Celia Liu, MS, AA, Sophia Cheng, LVN

We welcome anyone with a smartphone, tablet or willing to use one to join us.

Mandarin:

**高科技能健康组**

您有糖尿病或高血壓嗎？

為期六週的免費健康組可以讓您學習使用手機程式提升身體和心理健康

- 監察你的運動習慣和情緒
- 監測你的健康
- 與你的醫療團隊溝通
- 學習行為和壓力管理技能
- 透過遊戲去提升認知技能
- 團隊支持和互相扶持

**每週二早上十至十一時，一月二十日至二月二十四日**

AACI 217號房

茶點供應

鄭小姐
408-975-2730 (x384)

葉博士, PsyD, 東博士, PhD, Celia Liu, MS, AA, Sophia Cheng, LVN

我們歡迎任何有智能手機、平板電腦或有興趣使用的人參與！
Topics Covered in Group:

Group included collaboration with PCP and Dietician.

1. Orientation to group and mobile app.

2. Patient health goals, PCP’s recommendations, action plan to manage diabetes and/or hypertension.

3. Review what health factors group members tracked (each selected 2-3 things to track)

4. Obstacles to health goal and treatment compliance. Coping skills for managing health and stress.

5. Practice mindfulness, discuss cognitive model and negative cycle for chronic health conditions.

6. Exercise, food and nutrition for diabetes and hypertension.
Challenges

• Technical difficulties (e.g. password, email account, unfamiliarity with device, etc.).

• Inconsistent tracking and recording; some prefer paper and pen.

• Glitches with mobile app (translation error, use of language) that were discussed with the company.

• Population of patients (e.g. age, controlled vs. noncontrolled).
Positive Outcomes

• Group support and talk about experiences

• Coping with stressors and mood symptoms

• Learning how to manage health conditions

• Learning from integrated healthcare professionals

• Learn how to use technology and mobile devices.

• Self-reported decrease in mood symptoms, improvement in quality of life and self efficacy management of health conditions, positive patient satisfaction
Group 1:
Technology for Health -
Mandarin-speaking Group Demographics

- n= 9, males and females
- Age range: 56-84 years old
- Mean age: 79 years old
Technology for Health: Mandarin-speaking group
Technology for Health – Mandarin-speaking group
Group 2:
Technology for Health -
English-speaking Group Demographics

- n= 7, males and females
- Age range: 40-77 years old
- Mean age: 61 years old
Technology for Health: English speaking group

Graphs showing changes in GAD7, PHQ9, QOL, and SEMCD scores before (Pre) and after (Post) the intervention.
Technology for Health: English-speaking group

Patient Satisfaction

Total Score = 21/24

# Areas improved = 1.33

Pt. Satisfaction
Discussion

- Overall improvements in mood, quality of life, self-efficacy management of chronic disease.
- Group cohesion and support.
- Benefits of integrated care team for patient care.

Considerations:
- Cultural considerations, efficacy of treatment/methods.
- How to reach and help patients with uncontrolled health conditions.
- Affordability of technology or wearables to underserved populations.
- For our groups specifically, we could spend more time on intrinsic motivation and behavioral health strategies.
Thank you for listening!
Learning Community Project Overview and Outcomes

- Recruited 24 participants to begin project
- Choose individuals based on frequency of supports and acuity of symptoms. Creating 3 groups at different levels of functioning and support.
- 9 out of 22 continued using APPs and participating after the project ended
- 12 out of 22 completed the project and remained involve until they had complete the Healthy Living Skills group
Project Objectives

1. To determine if technology improved engagement in treatment and recommendations
2. To determine if mood was affected by irregular blood pressure and sugar levels
3. To determine if acuity and supports impact individuals' ability to use technology as part of treatment
4. To determine if individuals remained engaged in treatment with use of technology
What we learned

- Use of technology increased satisfaction with treatment and improved engagement, even after the actual project ended.
- Increase in degree of satisfaction with using technology, individuals began to use devices for social networking, education and stress management outside of treatment or groups.
- Severity of illness did not impact engagement or ability to use technology.
- Individuals without supports were more interested in using the devices for other things outside of health.
- That most of our populations has limited access to smart phones or data plans, during a survey it was determined only 17% had access.
- Irregular blood sugar readings impacted mood negatively.
Future Technology Strategies

• Agency has incorporated technology into health living skills groups as a standard protocol

• Expanded the use of android devices and Health APPS into the agency’s integrated care program

• Exploring the use of other health apps to assist with mental health and physical health improvement
Questions & Comments
Resources

Healthcare and technology news: mobihealthnews.com

Centerstone Research Institute: A Framework for Mobile Technology in Behavioral Healthcare


FDA Blog Post: Smart Ways to Manage Health Need Smart Regulation
Three-Part Webinar Series: How Technology Is Transforming Health Care

• Text Messaging: A Promising Tool for Managing and Improving Individual Care
  – View the recording in our archives

• Digital Self-Care: Using Technology to Improve Outcomes and Engagement
  – Thu., Dec. 3, 1:00 pm EST