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# Using Digital Patient-Facilitated Networks to Support Medical and Psychiatric Self Management between Clinical Encounters

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# Disclosures

Dr. Fortuna offers consulting services through Social Wellness.



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**Digital peer support---live or automated peer support services delivered through technology media.**



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# National Survey of Peer Support Specialists Ownership and Use of Technology

**N=146**

## **Gender**

Female=103

Male 43

## **Age range**

28-72 years

## **Race**

White=123

## **Peer Smartphone Ownership**

133 (95%)

93% of peer support specialists are willing to use smartphones to promote health behavior change with consumers,  $N=120$

83% of peer support specialists are willing to text message consumers to promote health behavior change



Fortuna, KL, et al. (2018). Smartphone ownership, use, and willingness to use smartphones to provide peer-delivered services: Results from a national online survey. *Psychiatric Quarterly*, 89(4), 947–956.

*Demographic Characteristics of Participants, N=21*

Characteristic

*n*                      *%*

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**Age (Mean, SD)**

39.85 (SD = 12.41)

**Gender**

Male                      6                      28.6%

Female                      15                      71.4%

**Race/ Ethnicity**

White                      20                      95.2%

Black/ African American                      1                      4.8%

**Psychiatric Diagnoses**

Bipolar Disorder                      6                      28.6%

Schizophrenia spectrum disorder                      12                      57.1%

Major Depressive Disorder                      3                      14.3%

**Living Status**

Lived independently                      12                      57.1%

Residential facility                      9                      42.6%

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# Types of Digital Peer Support

Peer-to-peer networks (i.e., informal groups like Facebook groups)

Peer-delivered programs supported with technology (i.e., trained peer support specialists that use telephone, smartphone apps, or videoconferences to offer peer support)

Peerbots/ Asynchronous Video



# Benefits of Digital Peer Support

- No geographical limitations
- No time limitations
- Engages service users in digital mental health outside of clinical environments
- Expands the reach of peer support services
- Increases the impact of peer support without additional in-person sessions
- Can access hard-to-reach groups—rural residents, home-bound adults, older adults, people experiencing homelessness, individuals who are deaf or hard of hearing



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Fortuna, KL, et al. (2020). Digital Peer Support Mental Health Interventions for People With a Lived Experience of a Serious Mental Illness: Systematic Review. *JMIR: Mental Health*, 7 (3), e16460



# Is Digital Peer Support Effective?

Digital peer support studies have established support for the feasibility, acceptability and preliminary effectiveness with regard to:

- Enhancing hope, quality of life, empowerment, social support and recovery;
- Enhancing functioning;
- Reducing symptoms;
- Improving engagement in services;
- Reductions in risky substance use; and
- High levels of satisfaction and perceived benefit.



# Digital Peer Support Certification

- What is Digital Peer Support?
- Digital Communication Skills
- Technology Literacy and Usage Skills
- Digital Peer Support Technologies
- Organizational Policies and Ethical Issues
  - Privacy and Confidentiality
  - Monitoring Digital Peer Support
  - How to Address A Digital Crisis
- How to Hire, Train, and Supervise Digital Peer Support Specialists

The Digital Peer Support Certification has been found to be an effective knowledge translation training that has shown to increase peer support specialists' knowledge, confidence and capacity to use digital peer support in practice.

# How to Handle a Crisis Digitally

## **How Do You Address a Crisis Digitally?**

As digital peer support specialists, you may encounter a crisis situation via a technology platform. For example, you may receive a text message about someone in crisis or a social media message on your personal account that someone is in crisis.

## **What factors may cause a crisis?**

Factors that may lead to a crisis include: home, school, work, loss of a job, the death of a loved one, other environmental factors, new medications, use of drugs or alcohol, trauma, poverty, and violence.



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# How to Handle a Crisis Digitally

## Common types of crisis situations

- Suicidal thoughts
- Suicide attempts
- Self-injury
- Substance use
- Psychiatric crisis
- Extreme emotional distress



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## De-escalation techniques

- Speak slowly, calmly, and confidently
- Use clear language
- Listen patiently
- Repeat the concerns back to the individual to acknowledge them.
- Ask how you can help
- Avoid intense questioning
- Avoid arguing

# Sample Template

- 1) What is the scenario? What is the individual stating? How has the individual made the statement—in email, over chat, social media, on a video-conference?
- 1) What is the individual's current location (this is important especially in the case of immediate danger and getting disconnected)? What is their phone number?
- 1) Is the individual alone? Is there a family member or loved one nearby?
- 2) Ask the individual if they feel that they are in immediate danger or that they are an immediate threat to others around them (if so, dial emergency services immediately).
- 3) What is the severity of the situation? Is this an emotional distress crisis?
  - 1) Include the service user in the process of determining what level of care is necessary: Do they need to go to the emergency room?
  - 2) Would they benefit from contacting warmlines or hotlines and checking back in with the peer support specialist after that?
  - 3) Should a crisis team come out to visit the individual?



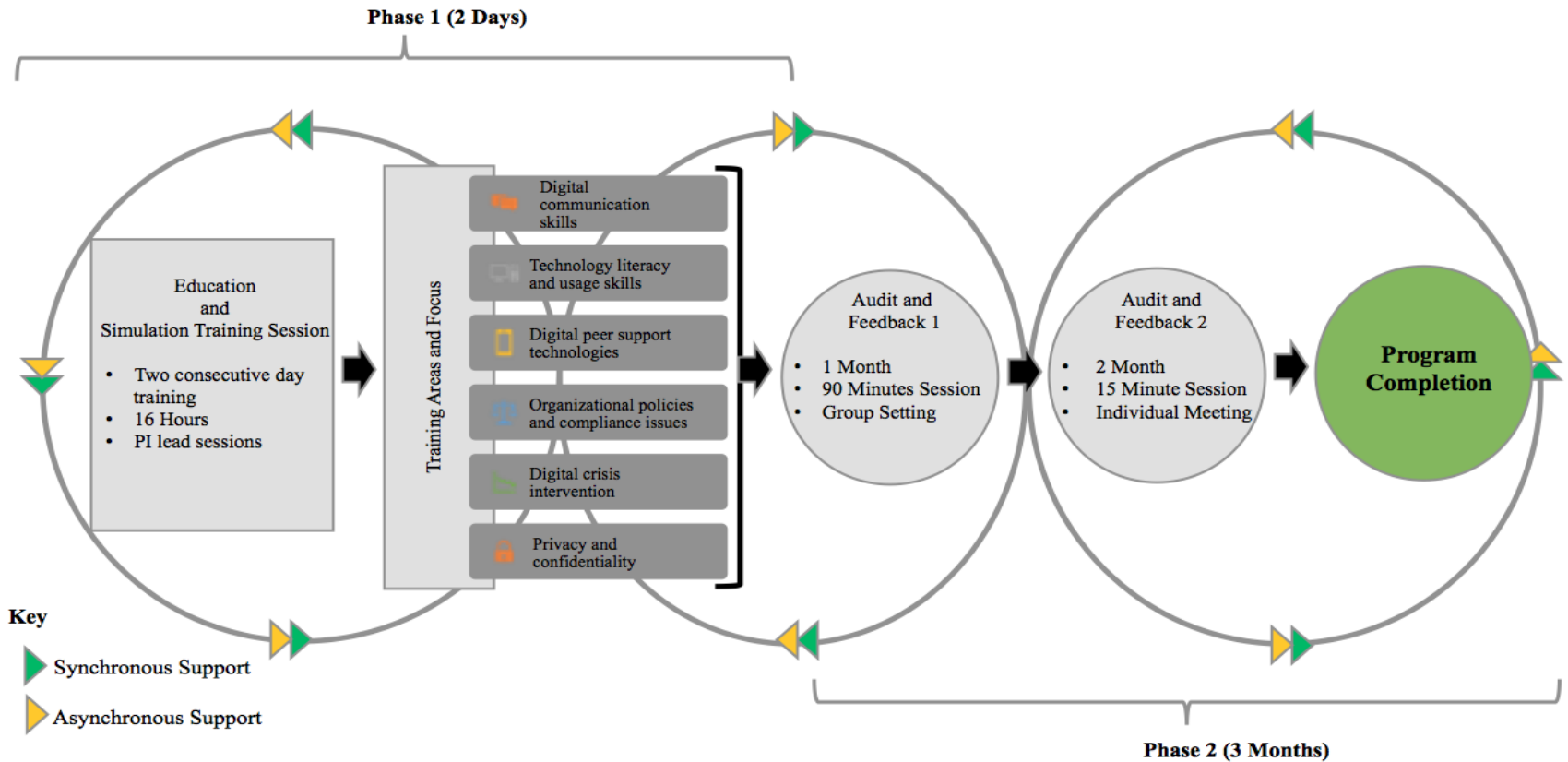
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# 3,000 Peer Support Specialists Trained



Figure 1. Digital Peer Support Certification Process



# PeerTECH Classes

1. PeerTECH Technology and Identifying Goals
2. Recovery & The Brain – Body Connection
3. Stress and my Health
4. Practical Facts on Physical and Mental Health
5. Recovery and Wellness/Healthy Lifestyle
6. Using Medications Effectively
7. Building Relationships
8. Managing Stress
9. How to Stay Well
10. Getting What You Need from the Health Care System



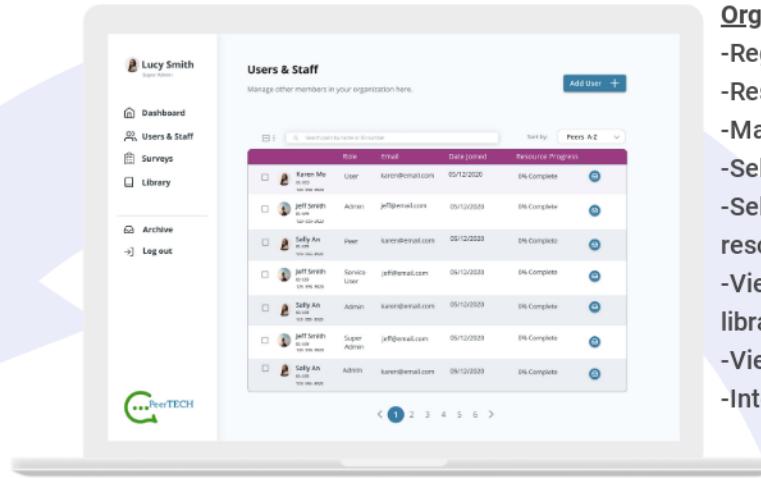
***Peer Support is embedded throughout the program.***



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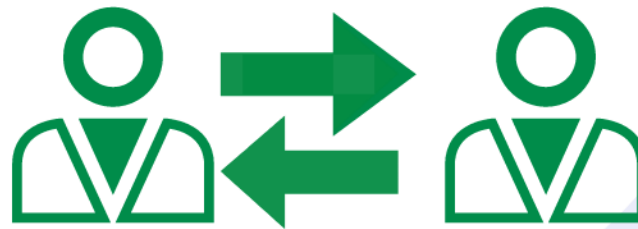
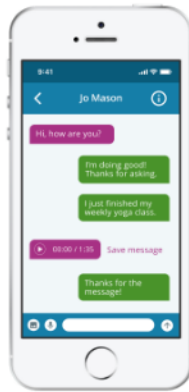


### Organization Admin:

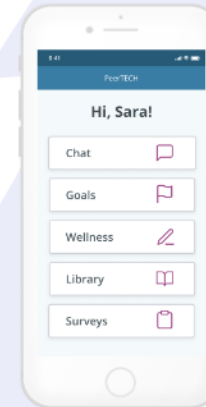
- Register peer support specialists and patients
- Reset peer support specialist and patient passwords
- Match patients with peer support specialists
- Select surveys to send out to patients
- Select intervention for patient's personalized resource library
- View patient progress through intervention resource library
- View patient survey results
- Integrate with electronic health record

### Peer Support Specialist:

- HIPAA-compliant text and video chat with assigned patients
- Access to resource library
- Notifications to reach out to patients based on survey scores
- Schedule work hours



Two-way HIPAA-compliant text and video chat between peer support specialists and patients



### Patient:

- HIPAA-compliant text and video chat with peer support specialist
- Personalized goal-setting
- Personalized wellness plan
- Daily self-management task list
- Resource library
- Surveys (e.g., loneliness, distress)

## Sociodemographic Characteristics of Study Participants (N=8)

Characteristic	n (%) or mean (SD)
Age, years	
Mean (SD)	68.8 (4.9)
Range	62–77
Sex, n (%)	
Female	7 (87.5)
Male	1 (12.5)
Mental health disorder, n (%)	
Major depressive disorder	5 (62.5)
Schizophrenia	2 (25.0)
Bipolar disorder	1 (12.5)
Physical comorbidity, n (%)	
Obesity	6 (75.0)
Hypertension	6 (75.0)
Osteoarthritis	6 (75.0)
Diabetes	5 (62.5)
High cholesterol	4 (50.0)
Heart disease	2 (25.0)
Fibromyalgia	1 (12.5)
Chronic obstructive pulmonary disorder	1 (12.5)
Two or more chronic health conditions, n (%)	8 (100.0)

# Results

## *Changes in Outcomes from Baseline to Post-treatment for Study Participants*

Measure	Baseline	Post treatment	Change in raw score	p-value
Medical self-management	62.63	76.63	14.00	0.140
Psychiatric self-management	2.38	3.69	1.31	<0.001
Quality of life	34.12	44.71	10.59	0.138
Hope	33.00	35.63	2.63	0.131
Self-efficacy	4.65	6.04	1.39	0.181
Social Support	39.49	53.53	14.04	0.245
Empowerment	2.36	2.18	-0.18	0.336

## Smartphone app may help older adults manage serious mental illness and chronic health conditions

New study in *The American Journal of Geriatric Psychiatry* indicates that middle-aged and older adults have the potential to use tailored smartphone interventions to self-manage their illness

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Philadelphia, PA, August 15, 2017

The use of new technologies in geriatric psychiatry shows promise for advancing personalized medicine and improving patient care. A new study [»](#) in *The American Journal of Geriatric Psychiatry* [»](#) describes the successful adaptation of an integrated medical and psychiatric self-management intervention to a smartphone application for middle-aged and older adults with serious mental illness.



### Innovative Apps Connect Elderly to Psychiatric Care

Smartphone technology offers wide-ranging opportunities for delivering essential interventions directly to patients, making treatment more efficient and, in some cases, more effective.

MEDSCAPE.COM

*Demographic Characteristics of Participants, N=21*

Characteristic

	<i>n</i>	<i>%</i>
<hr/>		
<b>Age (Mean, SD)</b>		
39.85 (SD = 12.41)		
<b>Gender</b>		
Male	6	28.6%
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<b>Living Status</b>		
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*Summary of Paired Samples T-tests, N=21*

Variable	Baseline	Post-Treatment	Change in Raw Score	p-value
	Mean ±SD	Mean ±SD		
Empowerment	59.46±7.85	49.81±16.95	9.65	.007**
Hope	36.05±5.80	35.19±12.71	-0.86	.757
Self-Efficacy to Manage Chronic Disease	5.95±2.55	7.01±1.96	1.06	.024**
Self-Rated Abilities for Health Practices	72.71±24.16	77.14±23.64	4.43	.370
Psychiatric Self-Management	54.76±7.56	55.05±14.07	0.29	.917
Social Support	69.42±4.34	64.31±24.17	-5.11	.112
Loneliness	31.19±8.89	31.05±9.91	-0.14	.912

# Achieving Health Equity Through Digital Health

**Textbox 1.** Best practices in strategic design and implementation of health informatics and digital health interventions in marginalized communities.

1. Increase recruitment and retention of diverse populations throughout the research and development process to allow for assessment of differential responses/outcomes of technologies and to mitigate preferential access to certain population sectors.
2. Leverage established stakeholders and trusted social networks to understand the strengths and resources within underserved communities.
3. Understand the social context of potential end users and populations as this allows for understanding of the social determinants of health and how these are embedded within systems of inequality within underserved communities.
4. Integrate community engagement through user-centered design or participatory design to better understand potential end users' needs and preferences to develop culturally relevant and meaningful interventions.
5. Gain an understanding of community partner technology infrastructure for capacity building to support and strengthen community-based health informatics interventions.
6. Plan the appropriate amount of time and resources to devote to community engagement processes for intervention development and sustainability.

Fortuna KL, Barr P, Goldstein C, et al. (2019). Application of community-engaged research to inform the development and implementation of a peer-delivered mobile health intervention for adults with serious mental illness. *Journal of Participatory Medicine*, 11(1):e12380

Brewer LC, Fortuna KL, Jones C, Walker R, Hayes SN, Patten CA, & Cooper LA. (2020). Back to the future: Achieving health equity through health informatics and digital health. *JMIR Mhealth Uhealth*, 8(1):e14512



Fortuna KL, Venegas M, Umucu E, Mois G, Walker R, & Brooks JM. (2019). The future of peer support in digital psychiatry: Promise, progress and opportunities. *Current Treatment Options in Psychiatry*, 1-11.



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# Thank You!

## Contact information:

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