Best Practices in Technology-Enabled Peer Recovery Support

Presented by: Dan McCawley, ICPR, CIP; Jon Dower, ICADC, CCS, SAP, CIP; and Caitlyn Larson, BSN, RN, MBA

Introductions

Caitlyn Larson, BSN, RN, MBA
VP of Clinical Performance, CHESS Health

Jon Dower, MS, NCC, CRC, ICADC, CCS, SAP
Director of Recovery Services, Ascension Recovery Services

Dan McCawley, ICPR, CIP
Director of Operations, West Virginia Sober Living
Today’s Discussion and Learning Objectives

1. Highlight the growing need for behavioral health care and gaps that lead to adverse outcomes for patients
2. Identify innovative ways to fill care gaps by leveraging technology, peer support, and a social network
3. Define possible funding sources for technological and clinical innovation

Growing Need for Behavioral Health Support in the US

- Substance use and adverse mental health events have markedly increased since 2020
- Only 13% of people who meet criteria for SUD seek treatment
- Of those who do pursue treatment, 40-60% return to substance use

Source: (JAMA, 2021, SAMHSA, 2021, NIDA, 2018)
The COVID Impact on Behavioral Health

Increased social isolation & opportunities for substance misuse

Challenges with access to care, evidenced-based services, & support

Increased occupational, housing, and economic instability

Shortage of providers, provider burn-out

US Adult Reports of Mental Health, Substance Use, and Suicidal Ideation During the COVID-19 Pandemic

- April-June 2020: 3-fold increased prevalences of anxiety and depression symptoms, 2-fold increased prevalence of suicidal ideation
  - May represent a transient response to mass trauma??
- September 2020: the prevalence of adverse mental health symptoms among US adults remained elevated compared with prepandemic estimates
  - Evidence of sustained adverse mental health symptoms among more than 5000 community-dwelling US adults highlights the need to promote preventive behaviors, expand mental health care access, and integrate medical and behavioral health services to mitigate the mental health effects of COVID-19.

Source: (SAMHSA, 2021, Czeisler, 2020, Czeisler, 2021)
System-level Gaps in Care

- The Health Resources and Services Administration (HRSA) is reporting an immense shortage nationwide of mental health and substance use treatment providers.
- State rates of mental health workforce range widely from 180:1 in Massachusetts to 1,100:1 in Alabama.
- Technology solutions for providers are a powerful tool in managing this shortage.

“Mental Health Workforce” includes psychiatrists, psychologists, LICSWs, counselors, marriage and family therapists, and APNs specializing in mental health care.

Source: (MHA, 2022)
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System-level Gaps in Care

Among the 41.1 million people who needed treatment only 6.5% received it in the past year. This disparity in unmet needs of SUD is known as the “treatment gap.”

Source: (SAMHSA, 2021, Office of National Drug Control Policy, 2022)
Access to Care in West Virginia

- A large percentage of households without even one vehicle live in areas that also have no access to transit.
- Of the 55 counties in West Virginia, some form of public transportation is ONLY available in 33.
- Multiple reports have found that transportation access improves healthcare outcomes, and others have found that lack of transport access decreases health outcomes.

Source: (Bianford et al, 2013)

Percentage of Household without a Vehicle in WV

Source: (Bianford et al, 2013)
Technology as a Linkage to Care, EBP Services, and Support

**Recovery Support**

- 24/7/365 support
- Sobriety celebrations
- Assessments [e.g., BAM, PHQ-9, GAD-7]
- Virtual support meetings
- All pathways peer support
- Social connection
- Referral to treatment
- Appt & Rx reminders
- Goal tracking & journaling
- Substance monitoring
- Content [e.g., CBT, recovery tools, resources]
- Guided meditation
- Care navigation
- Contingency management
- Connection to care providers

Technology as an Extension of Care

**Remote Monitoring**

- Convenient
- Restores dignity
- Provides additional accountability
- Testing options include CLIA waived, FDA approved, DOT approved devices

**Need to consider detection windows and cutoff levels**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Target</th>
<th>Detonation Time in M (time to onset of effect)</th>
<th>Detection Time in S (time to onset of effect)</th>
<th>Recovery Time in Days</th>
<th>Recruit Time in Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>Specified</td>
<td>1-2 hours [100]</td>
<td>0-4.5 hours [20]</td>
<td>3-7 days [20]</td>
<td>4-7 days [20]</td>
</tr>
</tbody>
</table>

Source: [ASAM, 2017]
**Technology as an Enhancement of Care**

**Background**

- Alcohol use disorders (AUDs) have physiological and behavioral components, as well as relapse rates similar to those of other chronic illnesses.
- Although evidence shows that continuing care for alcohol and drug use disorders is associated with better outcomes, patients leaving treatment for AUDs are not typically offered aftercare with ongoing monitoring.

**Study Conclusion**

The findings suggest that a multifaceted smartphone application may have significant benefit to patients in continuing care for alcohol use disorders.

Source: ([JAMA, 2014](#))

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**Technology as an Enhancement of Care**

**CHESS Health members prompted weekly in the Connections app to rate their “Recovery Progress”**

<table>
<thead>
<tr>
<th>Protective Factors [0-7 scale]</th>
<th>Risk Factors [0-7 scale]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in Recovery</td>
<td>Difficulty Sleeping</td>
</tr>
<tr>
<td>Attendance at Meetings</td>
<td>Struggle with urges</td>
</tr>
<tr>
<td>Spiritual Activities</td>
<td>Risky Situations</td>
</tr>
<tr>
<td>Work, School, Volunteering</td>
<td>Relationships Troubles</td>
</tr>
<tr>
<td>Supportive Family/Friends</td>
<td>Anxiety &amp; Depression</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Last Survey</th>
<th>Improvement</th>
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</thead>
<tbody>
<tr>
<td>5.41</td>
<td>5.89</td>
<td>8.9%</td>
</tr>
<tr>
<td>4.33</td>
<td>4.56</td>
<td>5.1%</td>
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<tr>
<td>3.59</td>
<td>4.19</td>
<td>16.6%</td>
</tr>
<tr>
<td>3.81</td>
<td>4.33</td>
<td>13.6%</td>
</tr>
<tr>
<td>4.93</td>
<td>5</td>
<td>1.6%</td>
</tr>
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<td>4.74</td>
<td>3.59</td>
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</tr>
<tr>
<td>2.59</td>
<td>1.96</td>
<td>24.3%</td>
</tr>
<tr>
<td>2.26</td>
<td>1.33</td>
<td>41.0%</td>
</tr>
<tr>
<td>2.85</td>
<td>2.19</td>
<td>23.4%</td>
</tr>
<tr>
<td>4.15</td>
<td>3.22</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

**Question #1:**

**Have you used drugs or alcohol in the last 7 days?**

- If reported use:
  - Peers outreach individual immediately to provide support

- Provider notification:
  - Notification of use or significant change in score sent to provider automatically with follow-up from CHESS team

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**Care in Vulnerable Populations**

**Background**
- Women with SUDs, in comparison to men, exhibit worse drug, health, emotional, and employment problems.
- Evidence shows that continuing care for SUDs is associated with better outcomes, and that retention in treatment is a key predictor of successful recovery.

**Study Conclusion**
- Given associations between retention and positive outcomes, mobile health technology may help improve outcomes among women, especially in settings where access to in-person services is difficult.

Source: (Sage Journals, 2019)

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**Growing Need for Support in Pregnancy & Postpartum**

- Nationally, opioid use in pregnancy has escalated dramatically in recent years, paralleling the epidemic observed in the general population.
- This population not only suffers higher rates of neonatal mortality and adverse outcomes for infants in the perinatal period, but severe maternal morbidity as well.

Source: (CDC, 2021, National Survey on Drug Use and Health, 2019, ACOG, 2021, NIH, 2020)
Growing Need for Support in Pregnancy & Postpartum

- Antepartum maternal opiate use increased by 5x
- NAS increased by 3x
- Mean hospital charges for discharges with NAS increased by $14,000

2009 to 2022: Overdose is a leading cause of maternal death

Source: ([JAMA, 2012](#), [Smid & Terplan, 2022](#))

How we Have Approached Supporting Individuals During Pregnancy & the Postpartum Period

- Screening
- Referral to treatment
- Prenatal care

Most overdose deaths occur in the setting of unrecognized or untreated SUD, after 6 weeks postpartum

Source: ([Smid & Terplan, 2022](#))
How we Need to Shift Our Approach

Referral to treatment

Screening

Prenatal care

Prevention Opportunity

Resources

Skills

Social Support

Healthcare

Education

Ongoing BH treatment

“Multidisciplinary long-term follow-up should include medical, developmental, and social support.” - ACOG, 2021

July 28, 2021: Support at 1:28 AM

Persephone Moon

I now have 41 days sober. But, I get why I numbed myself for so long. I can’t stand this pain now. How will I ever get through this sober?? I feel like I die a little more every single second that I don’t have my daughter.

Minutes later, CHESS replied via a private 1:1 message

“Hi Persephone Moon, I’m XXXXXX with CHESS. I saw your message that you posted and wanted to reach out because you are sooooooo worth fighting for your recovery”

“I’m sorry. I feel like I’m constantly having a breakdown since being separated from my daughter.”

“Absolutely no need to apologize! I’m so glad you are not trying to fight your thoughts by yourself. Your daughter sounds like someone you love a whole lot... Someone worth fighting for recovery :)”

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July 28, 2021: Support at 1:28 AM

Scott

OK listen the time away from your loved ones and your family does hurt! Its one of the hardest things that we've got to persevere through, but this to will pass! Use this pain as the way of your gift of desperation! It can become your greatest asset it can and will remind you of what you never want to go back to...you're going to be better for your family when you're not the old you! They need a brand new you! The person your struggling to find will emerge through this pain, a new, better gift to them not a burden... hope this helps, start trying to forgive yourself and love you first...

Britt

“I'm sorry. I feel like I'm constantly having a breakdown since being separated from my daughter.”

Absolutely no need to apologize! I'm so glad you are not trying to fight your thoughts by yourself. Your daughter sounds like someone you love a whole lot! Someone worth fighting for recovery :)

April 7, 2022 – 8 ½ Months Later

Update on Persephone Moon:

• Leveraged MAR & Virtual Peer Support Groups to strengthen her recovery
• Married her best friend
• Regained custody of her daughter
• Healthy delivery to a baby boy!

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June 2022 – A New Moon

Persephone Moon - 6/7/2022

Ugh Thankyou so much Lee, I appreciate both so so much!!! I seriously am so grateful to be able to have such beautiful people as part of my recovery journey!! I love and appreciate every single person on this app!! We are ALL rocking our way through our recovery and we are all amazing and fantastic and strong brave beautiful people that deserve all the happiness in the world!!!!

ALL of us!!! 🌟🌟🌟🌟🌟🌟🌟🌟🌟🌟🌟🌟🌟🌟

AND . . .

She celebrated 1 year of recovery June 16th, 2022

Child Welfare System

- Currently, 25 states and the District of Columbia mandate child welfare reporting for drug use in pregnancy
- Black and American Indian children are removed at up to 10x the rate of White children
- Destabilization after loss of custody has been associated with pregnancy-related deaths due to overdose

Source: (Smid & Terplan, 2022)
Guiding Principles

• Provide close follow up after delivery, ideally with a team capable of providing wrap around medical and psychosocial care
• Be an advocate for moms in early recovery whose children are in DCF/CPS custody in helping to develop plans of safe care that work toward family reunification
• Be cheerleaders for moms who are parenting as they negotiate the challenges of caring for a newborn, often with limited resources

Wrap Around Care for Women in WV

• Peer Support
• Housing
• Employment Services
• Treatment
Effectiveness of Peer Recovery Support Services

Current research suggests that people receiving peer recovery support may experience:

- Improved relationship with treatment providers (Sanders et al., 1998; Andreas et al., 2010)
- Increased treatment retention (Mangrum, 2008; Deering et al., 2011; Tracy et al., 2011)
- Reduced re-hospitalization rates (Min et al., 2007)
- Reduced relapse rates (Boisvert et al., 2008)
- Reduced substance use (Bernstein et al., 2005; Boyd et al., 2005; Kamon & Turner, 2013; Mangrum, 2008; O’Connell, ND; Rowe, et al., 2007; Armitage et al., 2010)
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Connection With Peers Through Technology

Virtual Support Meetings
Support, community, connection 7 days a week

Discussion Groups
Support when needed, tips for a successful recovery, wellness planning, motivation for growth, resources, and more!

Crisis Response
24/7 crisis support, care navigation, relapse prevention

Mentorship and Support
Encouragement without judgment

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24/7 Peer & Crisis Support

- Responsiveness
- Affirmations/reflections
- Open-ended questions
- Active listening/summaries
- Active listening/summaries
- Sharing with purpose & intent
- Empowering patients to be self-directed in their recovery
- Creating a safe, supportive, and recovery-oriented environment

Best Practices for Virtual Peer Support

Mary@Chess and Shana@Chess yall are so kind and am lucky to have in my life, I never thought that I could get the support I needed through an app but I absolutely feel closer to the people here than some of the people that are face to face with me.
The Power of Social Support

- Connection is the opposite of addiction
- Social support builds resiliency, self-esteem, security, a sense of belonging, and more!
- Technology-based solutions build connection immediately and help patients establish natural supports over time
- AA is all about “We”

The Results: Virtual Peer Support

You are in the right place and doing all the right things by reaching out. Life is like a pencil. A pencil by itself is very easy to break. Put that pencil with a handful of pencils, and it’s much more difficult to break. Let Connections be that handful of pencils around you. Hugs.

I can honestly say that if it was not for the Connections app and the virtual shot I probably wouldn’t be celebrating a year clean today.

I’m Danie, from Rochester NY. Today is a hard day, for no real reason, and I myself am struggling. It’s wonderful to be part of such a beautiful online community, thank you for always being so welcoming.

March 17th: today I’m grateful for this app! It’s so awesome to get to conveniently open this app and talk to people that are just like me! And the support I get from all of you! I am grateful to have responsibilities today, I never thought that I would enjoy adulting! I’m also grateful for maturing everyday! I’m grateful to be 29 and HAPPY! In the past like I said I had depression and I did not want to live past 30 so to be happy and excited about the future is such a pleasant difference!! Thank you to everyone on this app and the support you all give! It truly changes the whole vibe of my day and I’m grateful for y’all!!
Best Practices in Technology-Enabled Peer Recovery Support

10/10/22

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The Results: Supporting Vulnerable Populations

Hi my alias is Amelia and I live on Cape Cod in Massachusetts. I have a 9 year old son who I love to pieces! One word I'd use to describe being a parent is responsibility and I'm excited to be a part of this community to share and receive advice and support!

Hi my name is Jessica, I'm in Denver Colorado. I have 11 children, 6 boys and 5 girls ranging in age of 24 years to 1 and a half. I also have a grandson who is 2. I'm excited to be a sober mommy again. I have 4 months today. Life is super rewarding when your sober. I just moved into my own apartment. My youngest is in foster care so this is one more step to getting her home with me where she belongs. Her name is Serenity.

I truly care about all of you so much 😍 you're all becoming my family, sobriety is tough enough but with all of you and my home support system, it's exactly why I'm celebrating 1 year and many more to come! ❤❤❤❤❤❤❤❤❤❤❤❤❤❤❤❤❤

I'm looking forward to this. I think becoming a parent can be scary and exciting and I wish I would have had more parents to talk to when I was pregnant and some that had experience with being in mat program, and being a parent is hard and we all need the support we can get and it really is nice to talk to people who relate to us and go through the same struggles.

The Results: 24/7 Crisis & Peer Support

Thank you for checking in, each day has its own struggles but I am doing OK. Monday was really hard but today's better. The reaching out from you and others there helped me so much. I didn't know I had care or even looked at my check-in.

Thank you for sharing. I too have to wait for my eyes to adjust to dim light. I am so grateful that there are peers like you who are reaching out into the dimness and turning on the light for others.

Thank you for talking with me the other day it was the first time I have connected with anyone in recovery for general support. I wasn't sure how I'd do with this app or if I'd even get any of the support that I need for my journey to recover. It really helped knowing that I can be patient and wait for more harm reduction efforts to be made by my team of professionals that I've been working with for my substance use disorder. Thanks.
Key Takeaways & Benefits of Virtual Peer Support

- 24/7 coverage
- Safe & secure
- Highly accessible
- Data-informed
- Expanded recovery network
- Improves peer efficiency & reach
- Truly meeting patients where they are
- Patients show improved motivation & accountability
- Patients get exposure to multiple cultures & pathways
- Reinforces treatment adherence & treatment success

Possible Funding Sources

Federal Grants
- HRSA Rural Community Opioid Response Planning
- SAMHSA-Recovery Community Orgs & Mental Health Center Grants
- American Rescue Plan Act (SB21-137)

Settlement Funds
- Johnson & Johnson and the “Big Three” distributors
- Pharmacies (CVS/Walgreens/Walmart)
- Purdue Pharma and the Sackler Family

State and Local Funds
- NJ DMHAS DISCOVRS Grant
- Oregon Measure 110

Source: (Opioid Settlement Tracker, OPB, 2020)
“Realistically and pragmatically addressing addiction requires that we not let the perfect be the enemy of the good. Right now, we need all the good we can get.” – Dr. Nora Volkow

Source: [Nora’s Blog, 2022]