

# SMART-Wrap" Mobile Outcome Monitoring System Update and Information for Pilot Sites

Short Message Assisted Responsive Treatment for Wraparound



Eric J. Bruns, Lia Musumeci, Jonathan Olson
University of Washington Wraparound Evaluation and Research Team (UW WERT)
Philippa Hoover, Catherine Lavenberg, Melissa DeRosier
3C Institute
January 17th, 2023





National Wraparound Implementation Center



## Agenda

- Introduction
- What is SMART-Wrap?
- How was SMART-Wrap Informed by Wraparound experts?
- Results from pilot testing with caregivers and youth
- How to get involved in piloting SMART-Wrap
- Questions





## Introductions

• Wraparound Evaluation and Research Team, University of Washington

• 3C Institute







# SMART WRAP

# Short Message Assisted Responsive Treatment for Wraparound





National Wraparound Implementation Center

Advancing Systems O Enhancing the Workforce O Improving Outcomes





# What is SMART-Wrap?

- Text-based 'Mobile Routine Outcomes Monitoring" (mROM) system
- Aims to assess Wraparound quality, fidelity, satisfaction, and outcomes in an efficient, low burden way
- Sends caregivers and older youth participating in Wraparound single-item text-based outcome measures
- Project funded by National Institute of Mental Health 1R43MH126793-01A1 (Bruns, DeRosier, Pls)





# Why SMART Wrap?



SMS addresses inconsistent or incomplete data collection —Clients and providers find text-based data collection feasible and acceptable



SMS been found to be <u>clinically useful</u>

 enhancing MH service delivery by care providers



has been shown to increase treatment adherence and engagement, <u>and</u> outcomes





# What does SMART-Wrap measure?

#### **Caregiver Alliance:**

E.g., "My care coordinator and I agree on the goals we are working toward"

#### Youth/Caregiver Outcomes:

E.g., "Wraparound has helped reduce my stress"

#### Youth/Caregiver Engagement/Satisfaction:

E.g., "I am satisfied with the help I am receiving"

#### Caregiver Optimism/Stress:

E.g., "I feel confident I will be able to care for my child at home in the future"



national wraparound initiative



# deve Delp

- > The process was repeated once to provide convergence.
- > We also gathered feedback on system functionality.

## **Participating experts:**

- Rated draft items for each intermediate outcome
- Proposed wording changes
- Defined benchmarks to trigger alerts and outreach messages





# SMART Wrap items were developed with feedback from a *Delphi* review process

#### DOMAIN 1: ALLIANCE WITH CARE COORDINATOR/WRAPAROUND PROVIDERS

(Example rating scale: "How much do you agree with the following? – 0 = not at all, 1 = somewhat, 2 = very much")

1. PROPOSED ITEM: My care coordinator and I agree on what we are working on together

**Overall rating:** 

- 35 (94.5%) Essential
- 2 (5.5%) Optional

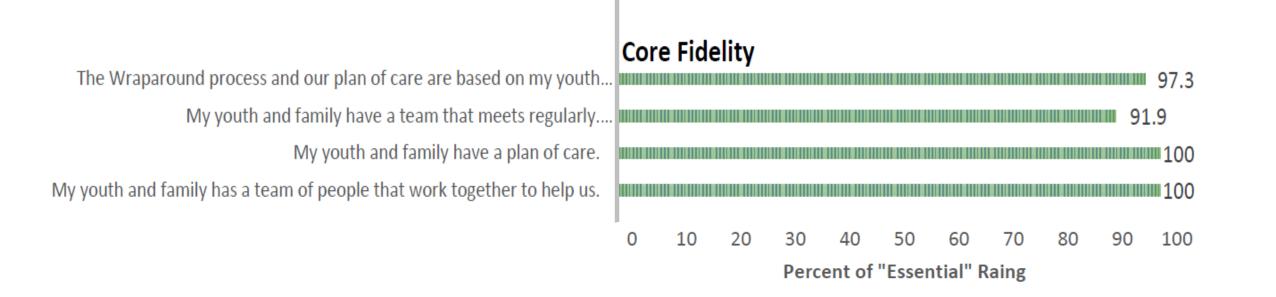
Please indicate if the wording of this item is:

- 21 (57%) Acceptable
- 15 (40.5) Acceptable with minor revisions
- 1 (2.5%) Unacceptable





# Experts rated proposed <u>fidelity</u> items "essential"...





# Experts were less unanimous about <u>alliance and engagement</u> items

0

Participating in Wraparound has given me confidence that I can...
I am worried about my youth's future....
I feel isolated by my youth's emotional or behavioral problems.
I am confident that our Wraparound team can find services or...
I feel confident I will be able to care for my youth at home in the future.

My youth's behavior causes stress or strain to me or a family member. Since starting Wraparound, our family has made progress toward.. My youth's life has improved since we started Wraparound. The Wraparound process has helped reduce my stress. I feel good about life right now.

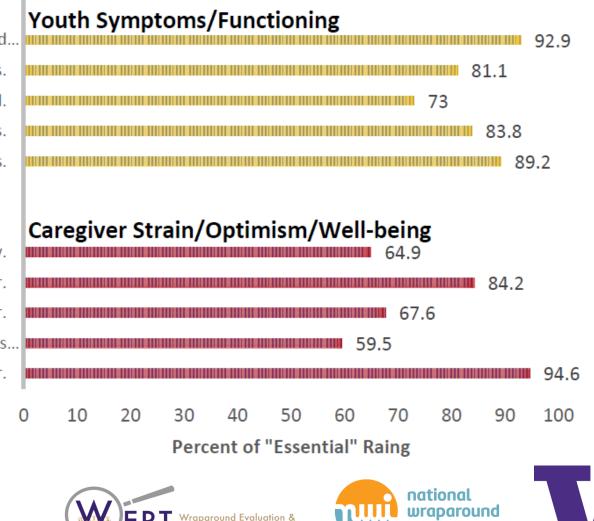
# Therapeutic Alliance 89.2 75.7 81.1 81.1 81.1 94.6 94.6 Satisfaction/Treatment Engagement 59.5 97.3 91.9

86.5 73 10 20 30 40 50 60 70 80 90 100 Percent of "Essential" Raing





# **Outcomes include well-being and caregiver strain/optimism**



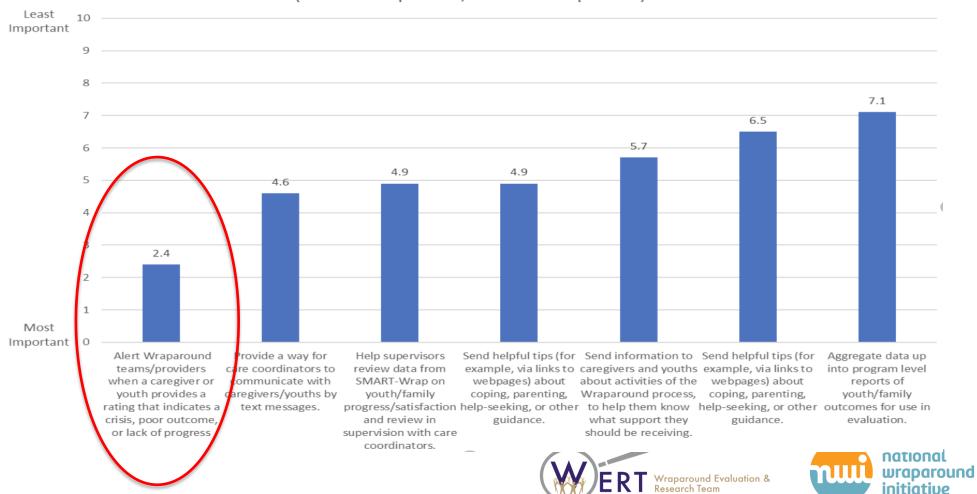
I am satisfied with my youth's progress since starting the Wraparound.. Wraparound has helped my family more effectively meet our needs. My care coordinator is helpful. Wraparound has met my family's needs. I am satisfied with the Wraparound process.

I feel my care coordinator genuinely appreciates me and my family. I trust my care coordinator. I feel connected to my care coordinator.

I am confident that Wraparound will get us the services or strategies... My care coordinator and I agree on what we are working on together.

#### Wraparound Experts Also Gave Input on the Most Important Functions for the System

Average Rating of the "Use of Importance" (1 = most important; 10 = least important)



# Delphi results helped in refining the items and SMART Wrap focus



- > Simplified the language of the assessment items to be developmentally appropriate for youth ages 14 – 17
- > Developed and refined automatic replies and outreach messages that the system will send participants following each SMS survey completion
- > Confirmed importance of the system from parent and youth advocates





# **Example feedback from parents and advocates**

- > "I think this will be very helpful to care coordinators and family partners in the field. Real time feedback will improve wraparound and hopefully overall progress of youth/families."
- > "I just want to say, thank you so much for considering my feedback as "parent with lived experience" – I appreciate this team's willingness on trying your best to get it right for us... it means a lot and will go a long way."







# After "expert" input, we did Initial Usability Testing to improve SMART-Wrap

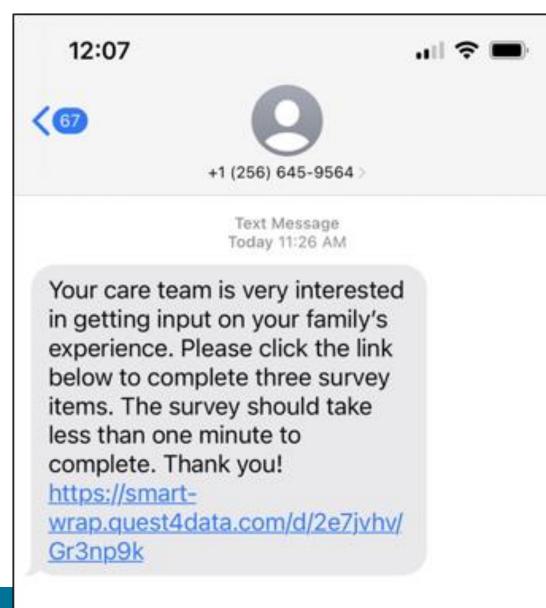


- > Round 1 included <u>16 participants</u>
  - > 10 caregivers, 3 young adults, and 3 youth
- > Caregivers and youths completed consent form and attended orientation
- > Caregivers and youth/young adults interacted with the system over a 2-week period
- > Participants completed survey evaluating usability, feasibility, and acceptability
- > We examined response times and





## EXAMPLE SMS NOTIFICATION



#### **O**3C Institute

| EXAMPLE | Hov          |
|---------|--------------|
| SURVEY  | l am<br>proc |
| VIEWED  | so f         |
| FROM    | 0            |
| PHONE   |              |

| 12:15                                                            | uI \$ ■             | ), |
|------------------------------------------------------------------|---------------------|----|
| SMART Wrap                                                       |                     |    |
|                                                                  |                     |    |
| Wraparound Su                                                    | rvey items          |    |
| How much do you agree v                                          | with the following? |    |
| I am satisfied with how th<br>process is working for m<br>so far |                     |    |
| O Not at all                                                     |                     |    |
| <ul> <li>Sometimes</li> </ul>                                    |                     |    |
| Always                                                           |                     |    |
|                                                                  |                     |    |
|                                                                  | Nex                 | at |
|                                                                  |                     |    |
|                                                                  |                     |    |
| AA 🔒 smart-wrap.que                                              | st4data.com さ       |    |
|                                                                  |                     |    |
|                                                                  | Щ                   |    |

<sup>O</sup>3C Institute

#### **Choosing the following:**

# TRYING OUT AUTOMATE D RESPONSES

#### Wraparound Survey Items

How much do you agree with the following?

I am satisfied with how the Wraparound process is working for my family and me so far

| O Not at all                  |      |
|-------------------------------|------|
| <ul> <li>Sometimes</li> </ul> |      |
| • Always                      |      |
|                               | Next |
|                               |      |

#### Had the Associated Feedback:

#### Wraparound Survey Items

Hearing from you about your satisfaction is important to us. Wraparound care coordinators should regularly check in with you about your satisfaction with the process. Knowing about your level of satisfaction will help us improve in the future.

| Prev | Next |  |
|------|------|--|
|      |      |  |



#### **Choosing the following:**

# TRYING OUT AUTOMATE D RESPONSES

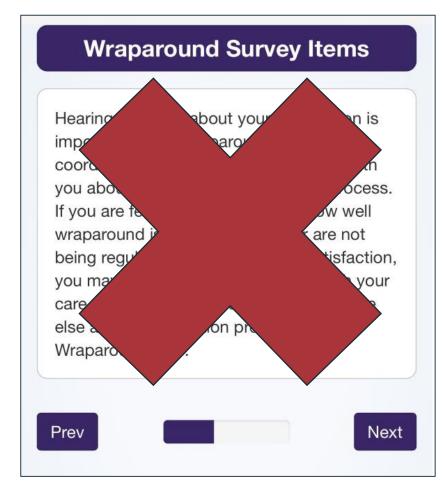
#### Wraparound Survey Items

How much do you agree with the following?

I am satisfied with how the Wraparound process is working for my family and me so far

| Sometimes |
|-----------|
|           |
| Always    |

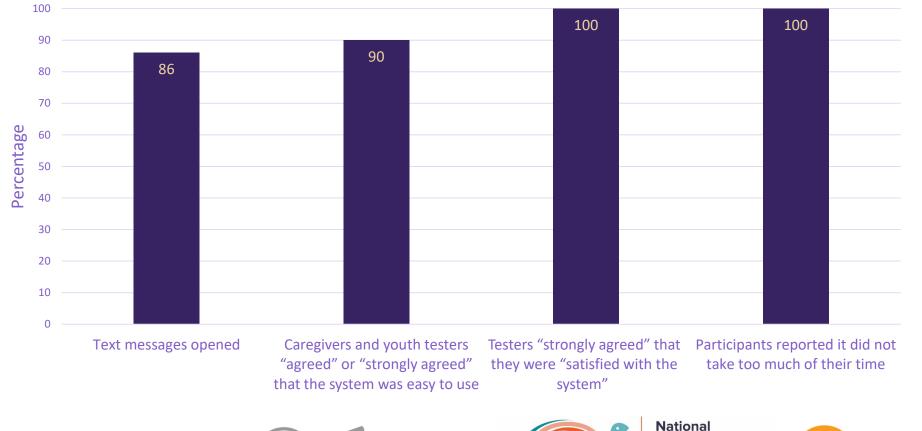
#### Had the Associated Feedback:



#### © 3C Institute

# **Results of Initial Usability Testing were encouraging**

• Surveys took an average of approx. <u>30 seconds to complete</u>







Wraparound Implementation Center



# Focus groups were instrumental to improving the system

- > SMART-Wrap Items: Parents said satisfaction and fidelity items should specify the time period for feedback
- > **Item wording:** Youth said to simplify items
- > Response scales: Youth suggested using emojis ③
- > Timing of sending surveys: Parents and youth both suggested the system should send texts at more convenient times
- > Setting up for success: Parents and youth both recommended care coordinators should help families set the system up in their phone as part of the engagement phase





# **Next Steps for SMART-Wrap**

- Based on results from user testing:
  - Survey items were revised to be more accessible, esp for youth
  - Adding reminder texts
  - Revised auto-generated response messages
- A dashboard and reporting system are now being developed for Wraparound providers and organizations
- UW WERT and NWI are now seeking additional SMART-Wrap pilot testing sites for a second round of testing







UNIVERSITY of WASHINGTON

# Second Round of SMART-Wrap Testing





National Wraparound Implementation Center

Advancing Systems o Enhancing the Workforce o Improving Outcomes





Second round of SMART-Wrap testing will further refine the tool and test the provider "dashboard"

- >We are seeking <u>10 Wraparound</u> provider organizations (or sites within an organization) across the U.S.
- >Sites will:
  - Identify 3 Wraparound care coordinators (CC) to participate in the pilot
  - $_{\odot}~$  One supervisor who oversees the work of the CCs
  - One manager/administrator who oversees the supervisors and CCs.
- Each CC will obtain consent for one family to participate in the study





Caregivers, youths, care coordinators, and supervisors/ managers will all participate in SMART-Wrap testing

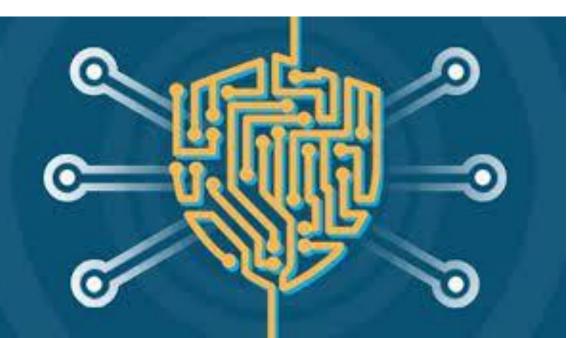
- > Parents/caregivers (CGs) and youths will use the SMART-Wrap prototype for two months
- > CCs and managers/supervisors will use a web-based SMART-Wrap interface to monitor engagement, satisfaction, fidelity, and outcomes
- > CGs, youth, CCs, and managers/supervisors will complete a post-test online evaluation survey after 2 months
- > Selected CGs, youth, CCs, and managers/ supervisors will participate in interviews or focus groups



national wraparound

# SMART-Wrap and the data collection software is completed with strict security measures

- Rigorous security measures will be employed for:
  - Data transfer
  - Storage to protect privacy
  - Confidentiality of client data



- The research team will track use of the system by all users during the test period including:
  - •Logins
  - •Response time
  - •Amount of time spent in system
  - •Number/type of technical
  - assistance requests





# Pilot testers will rate the usability of the system

- > After the <u>2-month pilot period</u>, all participants will evaluate experience with the components they used
- > Examples of ratings to be obtained include:
  - <u>SMART-Wrap usability</u> e.g., ease of use, navigation, technical problems
  - <u>Acceptability</u> e.g., satisfaction, motivation to use, worthwhileness
  - <u>Feasibility</u> e.g., time efficient, practical to use, doable in everyday life / care
  - <u>Value</u> e.g., valuable for improving care/outcomes, motivation to use after pilot
  - <u>Compatibility</u> of the SMART-Wrap product for integration with existing Wraparound systems (e.g., existing EMR/data system(s), existing evaluation methods)







All participants piloting SMART-Wrap will be compensated for their time

## > <u>Caregivers and youth will</u> receive **\$60 in incentives**

- Testing the system by receiving text messages with links to surveys
- Completing usability measures via online survey after pilot testing
- Focus groups/interview participants will receive an <u>additional</u> <u>\$100</u>

## > <u>Care Coordinators will receive</u> **\$100**

- referring CGs and youth
- completion of summary survey

### > Each participating <u>supervisor and manager will</u> receive **\$100** for

- Helping recruit and encourage the participat
- Reviewing results via the site-level "dashboard"



national

wraparound

# How to get involved:

> Email:

- Lia Musumeci at UW WERT at Lrm94@uw.edu (Or wrapeval@uw.edu)
- > From each participating initiative or organization, we seek to identify those interested in participating
  - 2-3 care coordinators
  - A supervisor, a manager
- > First steps will be to convene with 3C Research staff to get oriented to
  - The SMART-Wrap system
  - Study procedures





# Questions

Lia Musumeci: <u>lrm94@uw.edu</u> Eric Bruns: <u>ebruns@uw.edu</u> wrapeval@uw.edu





National Wraparound Implementation Center

Advancing Systems O Enhancing the Workforce O Improving Outcomes



