



Adapting and Adopting Telehealth Systems for Individuals with Serious Mental Illness

The College for Behavioral Health Leadership
March 2015

Vinfen – A Community Based Health and Human Services Organization

37-Year-Old 501(c)(3) Non-Profit Corporation

Serves About 7000 Individuals Annually

Over 197 Community Based Programs for People with:

- Psychiatric Conditions, IDD, Other Disabilities

Staff of Over 2700

Annual Operating Budget of over \$135 Million

Psychiatric Services Include:

18 Outreach Teams in “ACT Lite” Model – 2500 individuals

TAY Outreach Team serving 100 individuals in NE Mass



Two Projects

- 1. Adopted the Bosch “Health Buddy” system for older individuals with SMI and Chronic Medical Conditions- Started in January 2013.**
 - Imbedded in a Center for Medicare and Medicaid Innovation Grant
 - One of 3 interventions added to outreach teams in a project evaluating a Community Based Behavioral Health Home model
 - Project has targeted 450 individuals, but 75- 100 for Health Buddy use.

- 2. Developed and Launched with Wellframe a Smartphone App for use by Transition Aged Youth with SMI – Started in January 2015**
 - A Pilot for 20 TAY with SMI
 - Imbedded in an outreach team program model using the Transitions to Independence Process Model (Clark et al)

Vinfen
Center for Medicare and Medicaid
Innovation Grant :

Community Based Health Homes
for People with Serious Mental Illness

The project described was supported by Cooperative Agreement Number 1C1CMS330983 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services. The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of the U.S. Department of Health and Human Services or any of its agencies

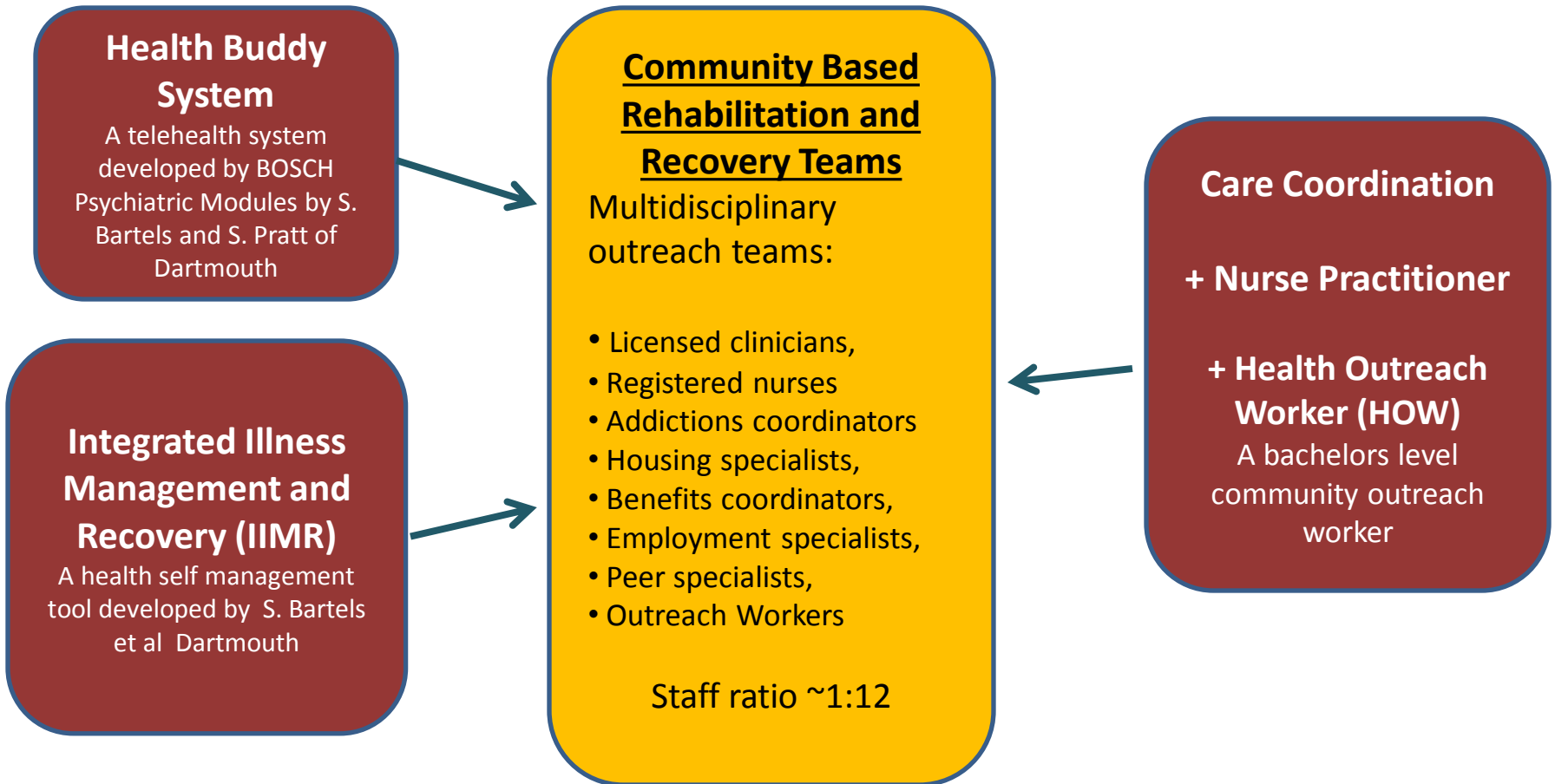
Behavioral Health Home Target Population: DMH SMI Population

2500 Individuals with SMI in DMH Services (of 12,500 in State)
Served in 18 “ACT-Lite” Outreach Teams (Higher Client to Staff Ratios)
Across Eastern Massachusetts

	<u>National Data</u>	<u>Vinfen Data</u>
Average Ann Cost of SMI:	\$43,792	\$68,000
Percent w Chronic Conditions:	25% have 5 or more	48% have 4-9 conditions or risk factors

National data: 2010 Medicare data compiled by Avalere Health and released by the SCAN Foundation

Community Based (in “PACT Lite” Outreach Teams vs Clinics) Health Homes for Individuals with Serious Mental Illness



Health Management Programs For The Most Complex, High Risk Individuals for Physical and Psychiatric Conditions

Physical Health Programs

Diabetes

COPD

Hypertension

Asthma

Heart Failure

Psychiatric Health Programs

Depression

Bipolar Disorder

Schizophrenia

Schizoaffective Disorder

PTSD

Using the Health Buddy: The Health Outreach Worker:

- Trains and supports participants to use the Health Buddy
- Monitors the Dashboard, sends alerts to NP or Team staff as appropriate



Participants using the health buddy

Using the Health Buddy

The Dashboard is reviewed daily by the Health Outreach Worker and/or Nurse

Health Buddy Desktop - Windows Internet Explorer provided by Vinfen

https://service.healthhero.com/cgi-bin/WebOb: Identifi... e How to Blur in PowerPoint | eHo... Health Buddy Desktop

Responses on Friday, February 22, 2013

[Add a new worklist](#)

Summary Risks **Vital Signs**

Patient	Response Time	Home Phone	Symptoms	Behavior	Knowledge	General Readings	Uncertain
<input type="radio"/> Newman, Josie (6544)	11:28 AM PST	909-789-0987	High	Low	Low	None	
<input type="radio"/> Jones, Jeffrey (3456)	05:38 AM PST	123-123-1234	Medium	High	Low	None	
<input checked="" type="radio"/> Mendon, Tiffany (6543)	07:04 AM PST	834-299-4333	Medium	Low	Low	None	

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Non-Responders

Patient	Patient Home Phone	Last HB Call	Last Response Date	Days Since Last Response
Coleman, Sharon (4999)	407-454-4111	03/01/2013	01/21/2013	42
Stickie, Susie M. (5555)	555-555-5555	03/05/2013	01/28/2013	36

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Paused

Patient	Home Phone	Pause Reason	Paused Date	Last Response Date
Ornish, Dean (1234)	650-690-9111	Hospitalization	01/18/2013	11/17/2012

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Start [Taskbar icons] 4:08 PM 3/5/2013

Technology helps provide the right care at the right time: Case Example:

Warning of an emerging problem

47 year old man with COPD and Depression

Frequent user of ED in winter months due to respiratory issues

HOW noted a number of yellow alerts relating to difficulty breathing and sleeping and escalated the problem to the NP

NP went to his day program, diagnosed pneumonia, prescribed antibiotics which the HOW helped him fill.

Outcome:

Averted an ED and probable hospital admission

Challenges of Embedding Technology in Services Delivery for “Older” Individuals with SMI

- Individuals Must Be Able and Willing to Engage
(40-50% are willing; Adherence has been good)
- Learning Curve for Staff
- Individuals Require Ongoing Training and Support
- Delivery Mode Options – Home Based, Mobile Device And Web Based System

Technology Implementation with This SMI Population Requires Initial Intense Support by Outreach Staff.

Provisional CMMI Outcomes to Date:

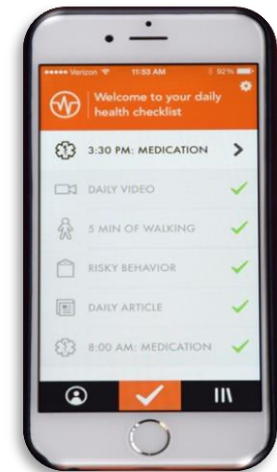
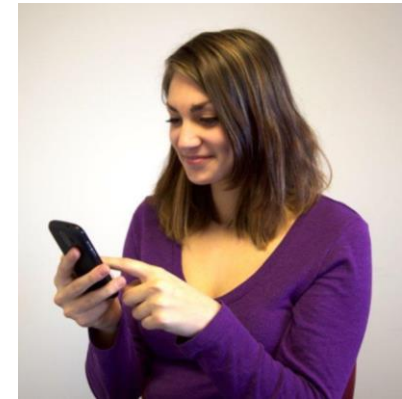
- Inpatient Admissions are down 18.8%
- ER visits are down 36.5%
- Potential savings from these reductions in utilization are \$1,742 PPPY
- Estimated savings to date \$1.2 Million

Just started an R01 with Steve Bartels to tease out contributing effects of Health Buddy, IIMR and Nursing Staff

Second Project: Vinfen - Wellframe App for Young Adults

Three Main Elements:

- (1) a **personalized daily schedule** that includes medication reminders, questions on emotional and mental status, an exercise log, clinical tools and health related videos and articles;
- (2) a **personalized 'tool box'** that contains the young adults' goals, their strengths and their most effective coping strategies and problem solving techniques; and
- (3) a **content library** that provides articles, video and audio links to a variety of key topics such as nutrition, safe sex, and personal safety.



Wellframe Content Library –Examples: (Total = 50+ to Date)

Coping Strategies

- List of Coping Skills
- Deep Breathing Techniques
- 5 Senses Meditation
- Grounding
- Mindful Positive Affirmations
- Breaking Behavior Chains

Health Practices

- Getting a Good Night's Sleep
- Nutrition
- Safe Sex and Decision Making
 - Contraception
 - Facts about STIs
- Facts about Drugs and Alcohol
- Taking Medications Effectively

Personal Expressions

- Success Stories

Solving Problems

- SODAS
- Keeping Safe
 - Getting There
 - Hanging out with your friends
 - Getting Home
- Violence in Relationships
 - How to know when you're in a violent relationship
 - How to leave a violent relationship

Where To Go Next

- Obtaining Benefits
- Pharmacies
- Treatment Offices
- ERs
- Public Transportation

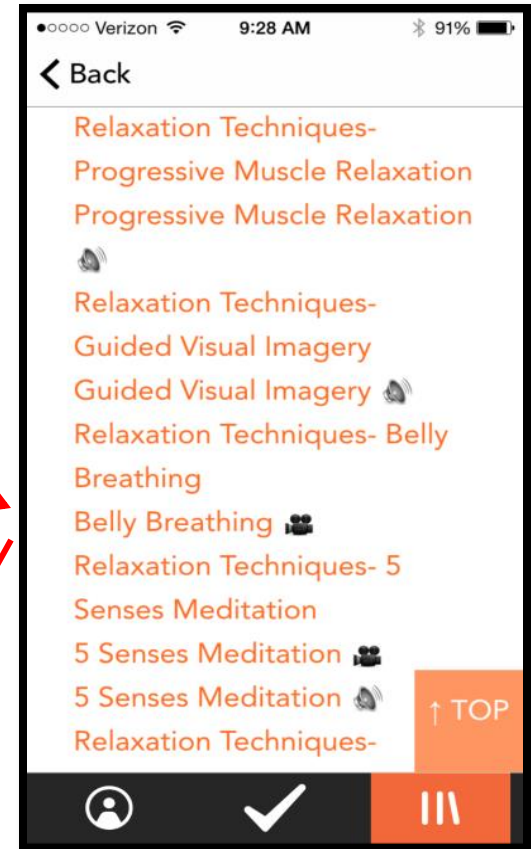
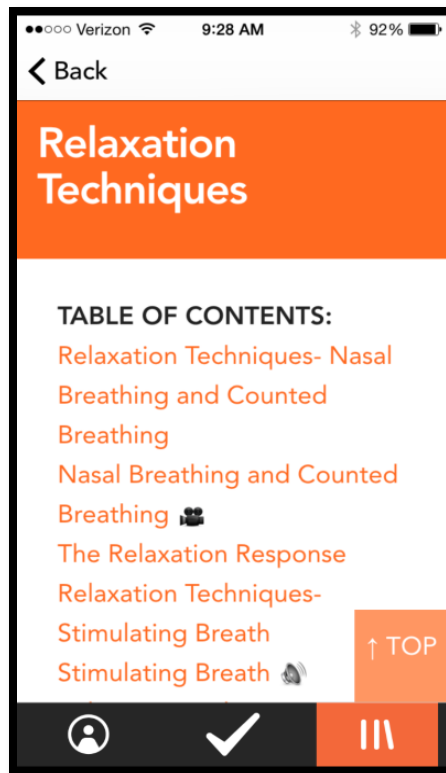
Data tracking for App users:

Use of the App

- Adherence
- Patterns and frequency of use
- Content Library access
- Communications with staff through the App
- Alerts triggered
- Responses to emotional and mental health status

Outcomes

- Changes in health outcomes such as acute service utilization currently tracked by Vinfen
- Comparisons to non-users
- Encounters
- Changes in user satisfaction (SF-12)

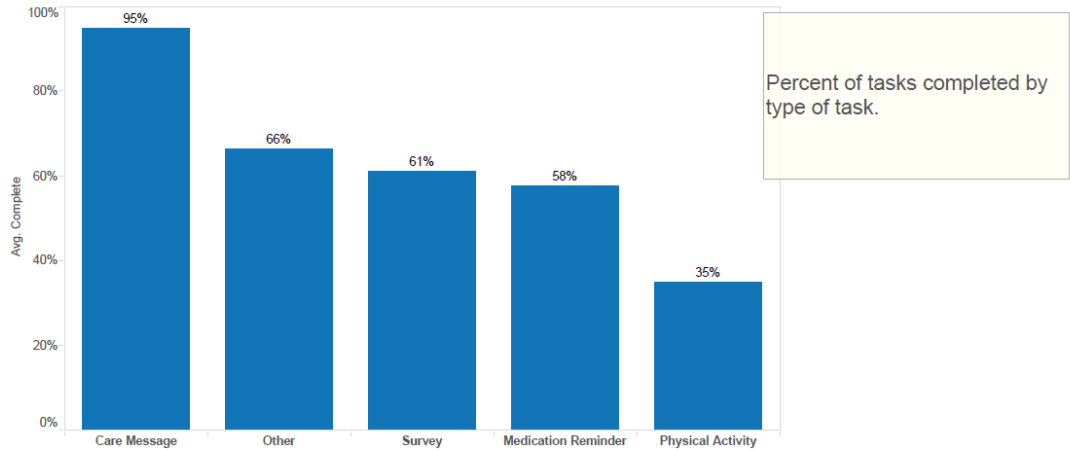


Chloe explains belly breathing (video)

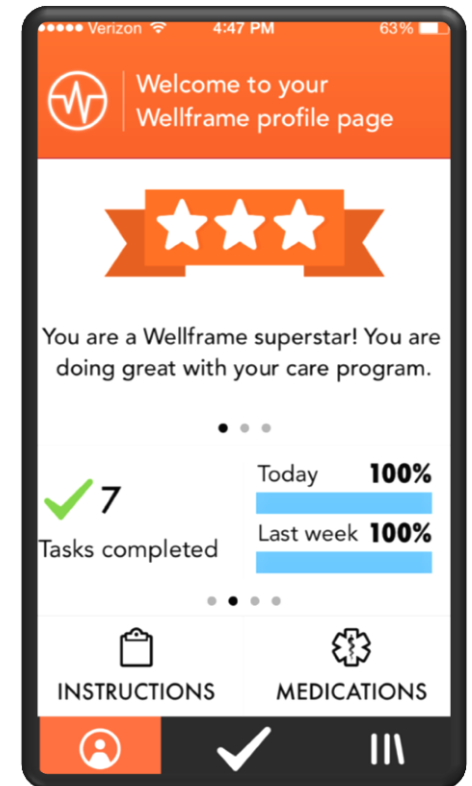


Vinfen Report - 2/5/2015

Task completion and messaging by day of the week.	Task Completion by Type	Activity Map.	Task completion of individual young adults.	Medication Completion	Medication Completion - continued	Ranked Yo Completion
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Dashboard Reports and Incentives for Engagement



Young Adult	Reward Period	Days in Period	Time Spent on Content	Days Active	Tasks Completed	Current Engagement
vinfen002	1 - in progress	13/15	23 min	85%	62%	✗
vinfen003	1 - in progress	13/15	1 min	38%	27%	✗
vinfen004	1 - in progress	9/15	43 min	100%	100%	✓
vinfen005	1 - in progress	9/15	0 min	88%	72%	✗
vinfen006	1 - in progress	9/15	1 min	63%	42%	✗
vinfen007	1 - in progress	9/15	2 min	75%	68%	✗
vinfen008	1 - in progress	6/15	7 min	100%	74%	✓
vinfen009	1 - in progress	1/15	5 min	100%	100%	✓
vinfen010	1 - in progress	1/15	0 min	100%	100%	✓

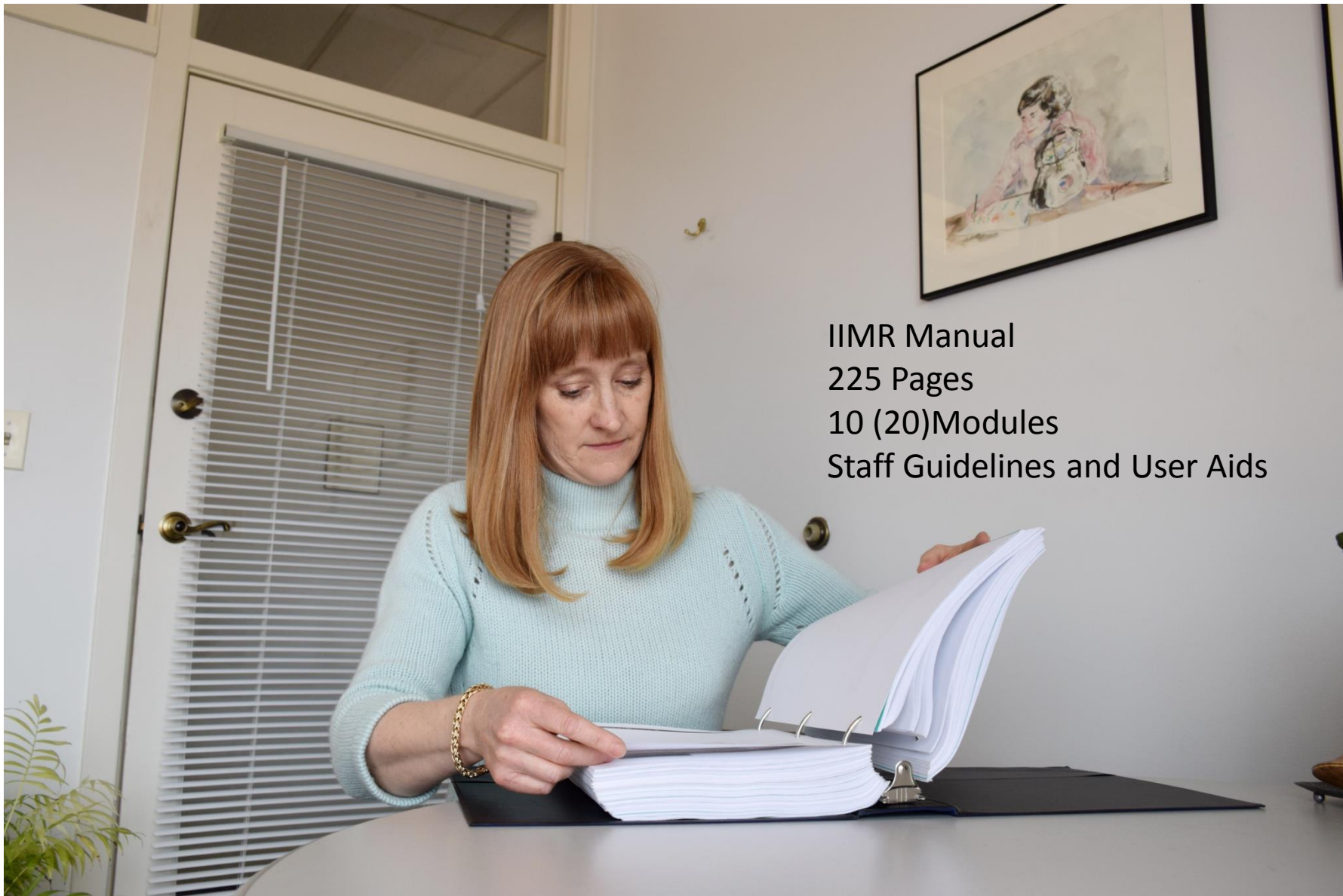
Rewards Criteria

≥ 70% Engagement

Wellframe Experience to Date:

Participants and Staff:

- Accelerated Learning Curve (Adolescents and Young Adults Already Competent Users)
- Good Adherence to Date
- We (with Users) Will Continue to Shape Content



IIMR Manual
225 Pages
10 (20) Modules
Staff Guidelines and User Aids

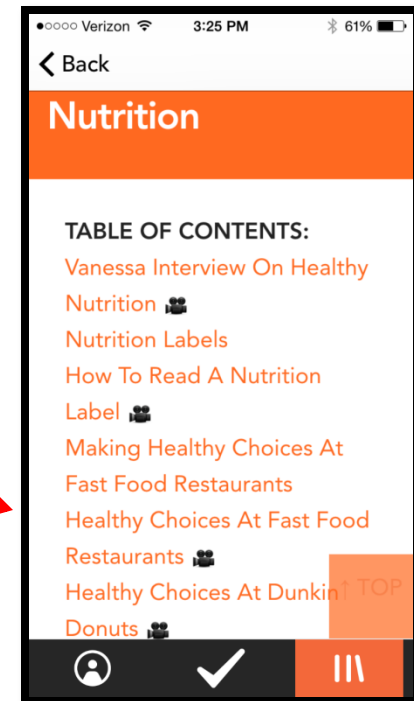


Jairo shares exercise tips

Videos include staff and young adults in the program



Elizabeth discussed health choices at McDonalds



Adopting Clinical / Rehabilitation Technology into Telehealth Systems:

IIMR Manual, TIP Manual, WRAP, Vinfen Protocol Library

How Fast and How Far

will Technology Changes Move Clinical and Recovery Content?

Questions: How To Adapt/Adopt and Package Interventions:

A la carte Order vs Stepwise Toolkit?

Relative Contributions of “Elements” in the Packaged Program?

Explanations for Users – How Much?

Functional Life Management Tools (Schedules, Med Reminders)?

Best Designs for Protocols for Practicing Clinical/ Recovery Skills
(ie Breathing for Stress: Simple Scripts? Videos?)?

Connections to Support Staff?

Data Available for Feedback to Shape User and Support Staff Decisions?

vinfen

transforming lives together

950 Cambridge Street, Cambridge, MA 02141

Established in 1977, Vinfen is a private, nonprofit human services organization and the leading mental health provider in Massachusetts. Vinfen provides a comprehensive array of services to youths and adults with psychiatric, developmental and behavioral disabilities. Vinfen's 2,300 dedicated employees are experienced, highly trained professionals who provide a full range of educational, rehabilitative and clinical services in more than 200 programs throughout eastern Massachusetts and northern Connecticut. For more information, visit www.vinfen.org.