

# Improving Integrated Care with Digital Technology Tools

September 15, 2015 2:00 p.m. Eastern

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## Improving Integrated Care with Digital Technology Tools

Grantmakers in Health Webinar

September 15, 2015

Based in Portland, Oregon, Cambia Health Foundation is the corporate foundation of Cambia Health Solutions, a total health solutions company dedicated to transforming the way people experience health care.

# utahsmartcare

**Improving Patient Engagement & Outcomes  
Through An Innovative Care Model**



utahsmartcare

UTAH  
SMARTCARE  
BEGINNINGS

How do we bridge the gap between **behavioral health**  
and **physical health care**?



Co-location



Intergrated Care Teams



Technology

UTAH  
SMARTCARE  
PARTNERS



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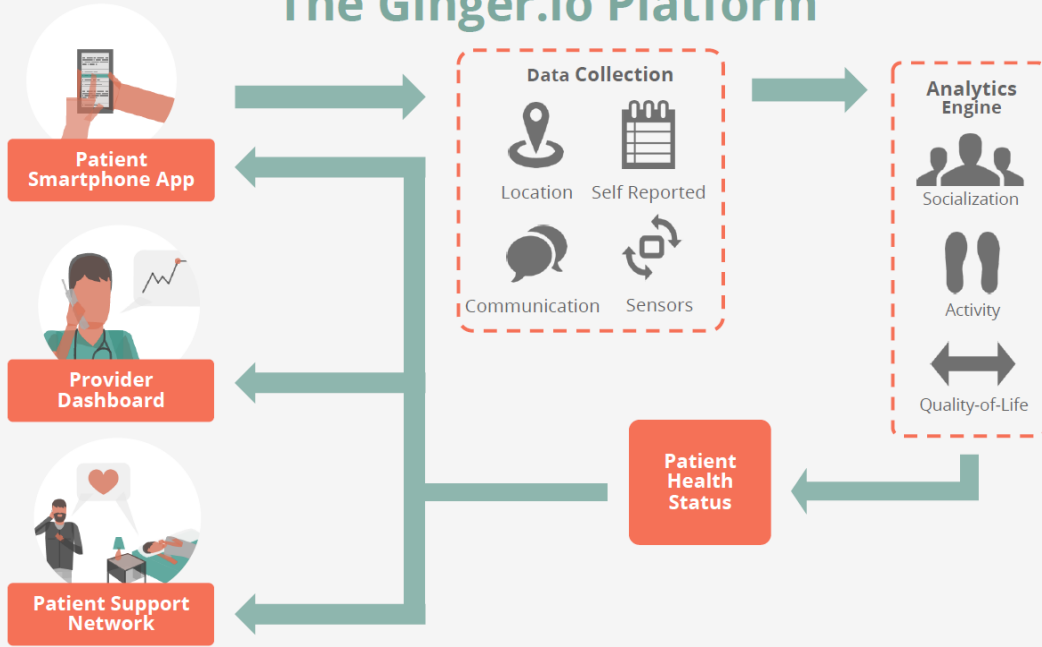
USING  
TECHNOLOGY  
IN PATIENT  
CARE

What is the **benefit**?

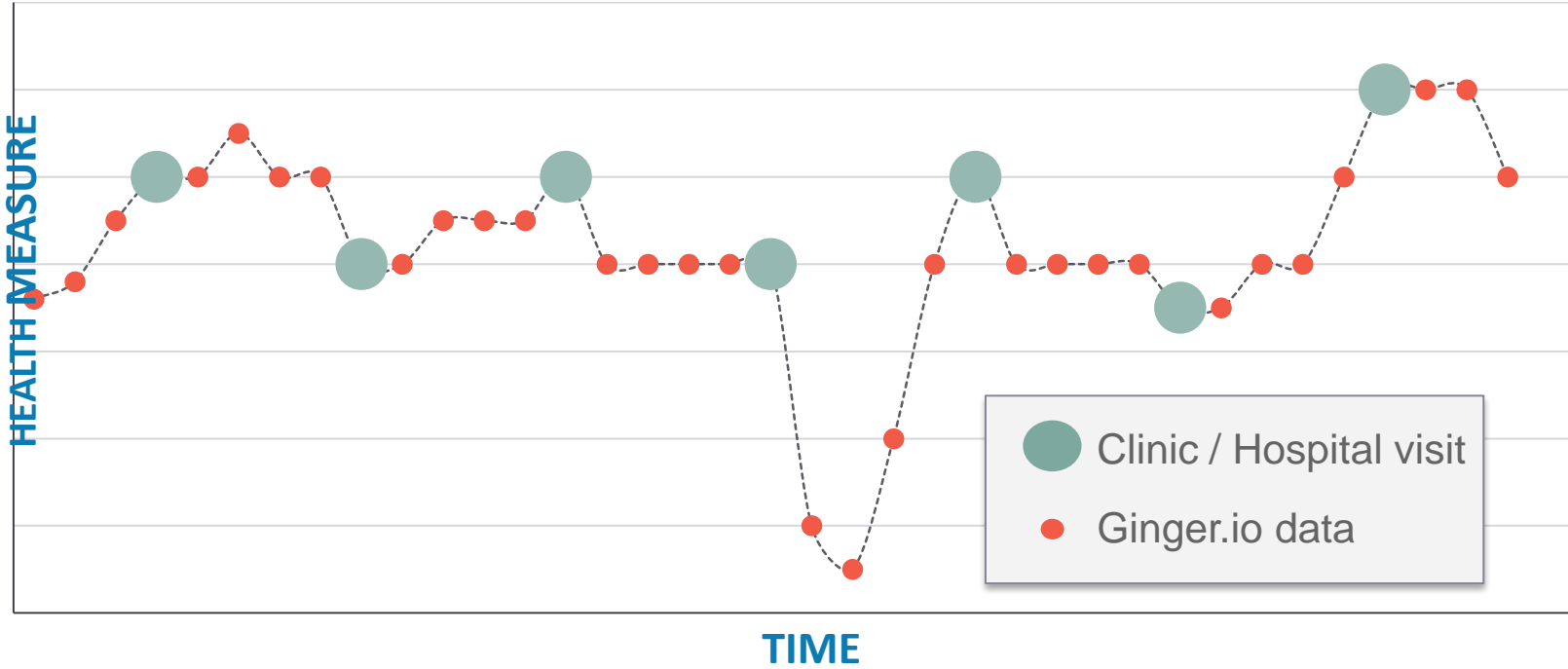
What is the **risk**?

What are your strategies for **risk mitigation**?

# The Ginger.io Platform



# Ginger.io Transitions Care from **Episodic Data** to **Continuous Insight**







EXPECTED  
OUTCOMES

# Triple Aim + Provider Satisfaction

- Improved Patient Care
  - Patient satisfaction, patient engagement
- Improved Health Outcomes (behavioral and physical)
  - Improved PHQ 9 and OQ scores, labs and vitals, hospitalizations
- Cost Savings
  - Reduced ED visits, reduced hospitalizations, total patient cost



**USER  
EXPERIENCE**

## **Benefits**

### Patients

- Connection to caregiver(s)
- Insight into physical/mental health

### Care Providers

- Alert(s)
- Pattern(s) identified

## **Barriers**

### Patients

- Access to smartphone(s)

### Care Providers

- Limited access to information



Monthly Progress Report

## Utah Smart Care in Weber County

142 x

Last 30 Days

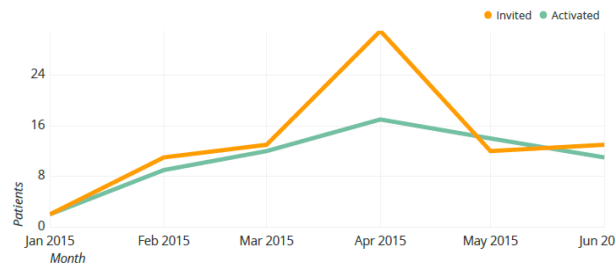
<b>88</b>	<b>12</b>	<b>20</b>
Active* Patients	New Patients Invited	Average Weekly Patient Alerts

To Date

<b>118</b>	<b>85%</b>	<b>82%</b>
Activated Patients	Patients Engaged** 30+ Days	Confidence***

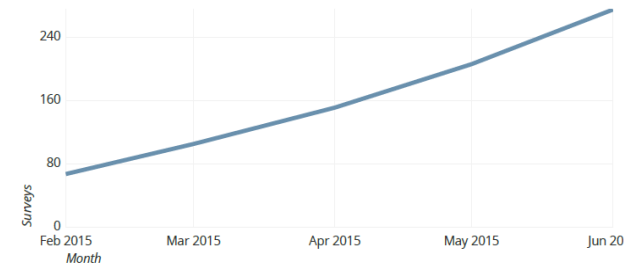
Enrollment

Monthly Patient Enrollment



Survey volume

Total PHQ-9s Completed Since Launch



\* "Active" = patients currently with the app.

\*\* "Engaged" = person engaging with the app after 30 days.

\*\*\* Confidence = person answered positively to "Does Ginger.io help you feel more confident that you are able to manage your mental health condition?"

LESSONS  
FOR  
SIMILAR  
PROJECTS



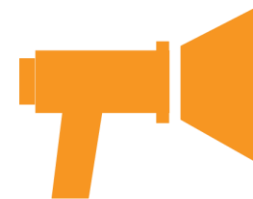
Choose Project  
Partners Carefully



Involve Clinicians



Be Flexible



Keep Your Funders Informed

SUGGESTIONS  
FOR  
GRANT  
MAKERS

# Health IT Changes Daily

How Funders Can Add Value (beyond funding)

- Assist grantees with contracts and negotiations
- Review sustainability of technology and project
- Consider other non-financial resources or support you can provide

**SUGGESTIONS  
FOR  
GRANT  
MAKERS**

# **Technology Sector vs. Health & Human Services**

The Challenges of Aligning Paradigms

- Funding
- Timeframe
- Priorities



# Flexibility and Adaptability

Are you ready for a pivot?

Be a flexible grant maker

Prepare your grantees for change

Ensure end users are supported through change



The Colorado Health Foundation™

# Together

## Technology & Integrated Care

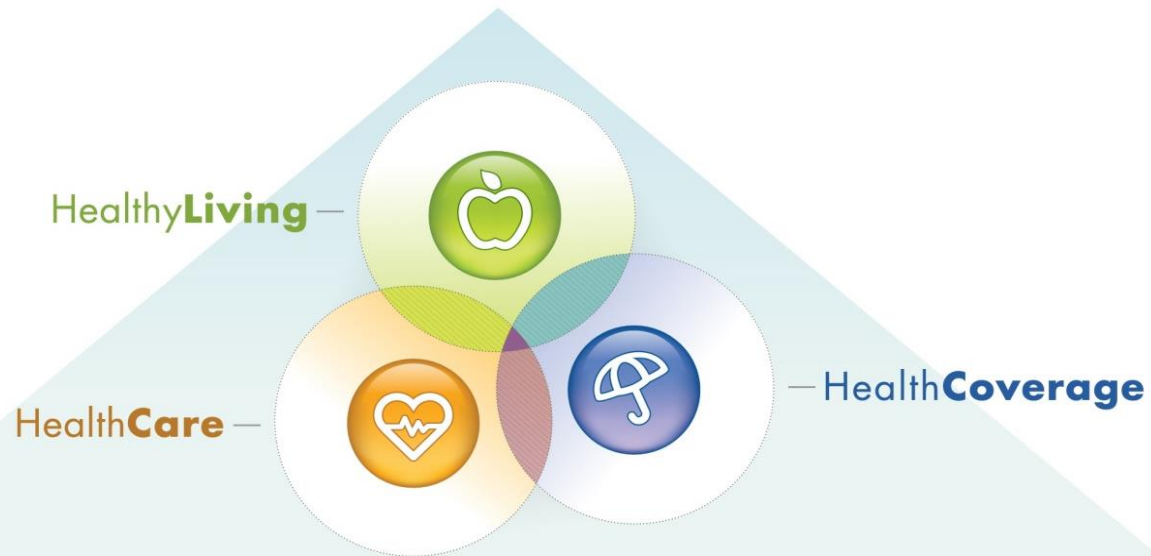
### GIH Webinar

September 15, 2015

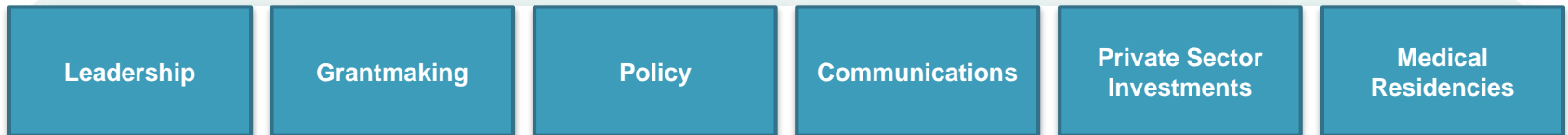


Together, we will make Colorado the healthiest state in the nation.

By investing in our three community outcomes...



and by using six key tools...



we will achieve our measurable results.

## Health Care



### Goal

All Coloradans achieve health with support from a network of primary health care and community services

### Strategies



- Support communities to prevent disease and improve population health
- Strengthen the delivery of comprehensive, person-centered primary care
- Empower individuals and families to manage their own health

# Grants to Denver Health

## **November 2010**

- Integrated Behavioral Health Specialists
- Care Management Software
- Telephonic Counseling
- Interactive Voice Recognition (IVR) Follow up

## **July 2014**

- Integrated Behavioral Health Specialists
- 'Improve Your Health'
- Telephonic Counseling
- Self-Management Technologies



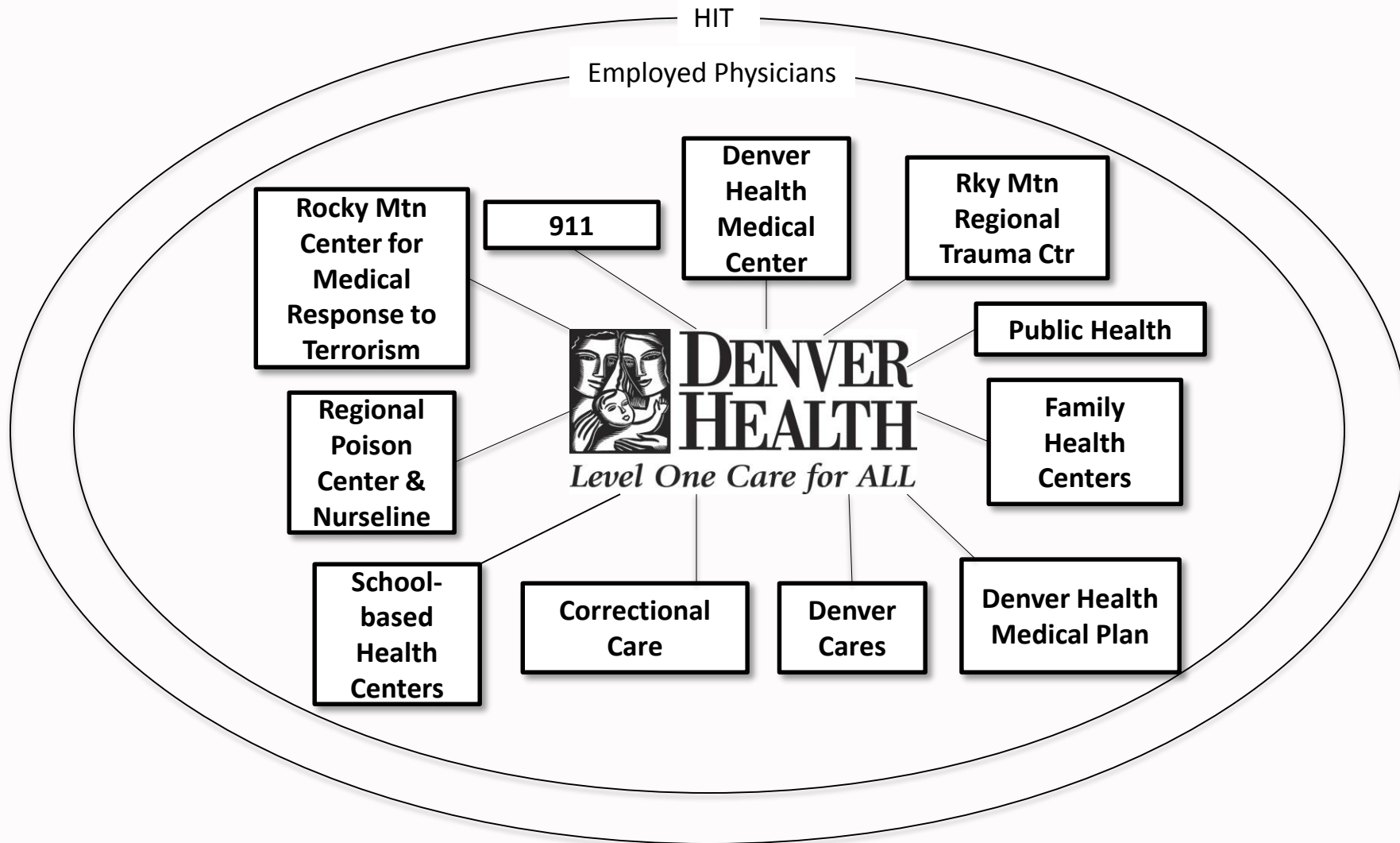
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# The Development of Technology Facilitated Behavioral Health Care at Denver Health

David Brody, MD  
Medical Director  
Denver Health Managed Care Plans  
Professor of Medicine  
University of Colorado School of Medicine





# Integrated Care Grants

Activity	Funder
Telephonic Depression Intervention	RWJF
Telephonic Depression/Anxiety Intervention	CHF
Telephonic Adolescent/Depression/Self Harm Pilot	CHF
Integrated Care at Lowry, Eastside & Westside	CHF
Improve Your Health Behavioral Risk Factor Screening Intervention	CHF (ACT grant)

# Telephonic Depression Intervention

Phone Calls	Week 2	Week 3	Week 5	Week 7	Week 9	Week 11
Diagnostic assessment	Full	PHQ9	PHQ9	PHQ9	PHQ9	PHQ9
Medication adherence	✓	✓	✓	✓	✓	✓
Behavioral activation		✓	✓	✓	✓	✓
Developing self care plan					✓	✓
Patients receive copy of depression coping plan		✓	✓	✓	✓	✓

Outcomes assessed at baseline, 6, 12, and 24 weeks



# Benefits for Patients

## Telehealth benefits patients by:

- Eliminating need for *transportation* and *child care*
- Increasing access to care through *lower costs, provider availability, extended coverage to underserved populations and underserved geographical regions*
- Reducing *stigma* associated with being seen in a mental health clinic
- Facilitating *willingness to disclose personal information*

# Outcomes

<b>Improvement in PHQ-9*</b>	<b>UC</b>	<b>TC</b>	<b>p-value</b>
6 Week	3.349	3.627	0.665
12 Week	5.348	6.976	0.036
24 Week	7.499	9.109	0.058
<b>Improvement in Hopkins* (HSCL)</b>			
6 Week	0.048	0.094	0.559
12 Week	0.072	0.390	0.001
24 Week	0.272	0.578	0.013

## TDI Changes

- Patients with just anxiety can be included
- Primarily enrolling patients referred by PCP or self-referred
- No control group
- Patients may select up to 3 modules from a total of 12 available modules
- Number of therapy sessions increased from 5 to 8 plus booster sessions for patients who have relapsed
- Improved PCP feedback process which includes algorithm based medication recommendations

# Module Choices

Patients can chose  
*at least 3* call topics



- Getting Going
- Grief and Loss
- Healthy Eating
- Healthy Relationships
- Improve Sleep Patterns
- Manage Stress Better
- Mind Tricks for Pain
- Overcoming Illness
- Physical Activity
- Positive Thinking
- Problem-Solving
- Worrying Less
- Next up-Trauma

# DENVER HEALTH MEDICAL CENTER

## Telephonic Counseling for Depression and Anxiety Provider Feedback Report – Follow-Up Calls

6 Week Evaluation     12 Week Evaluation     24 Week Evaluation

MRN: \_\_\_\_\_  
 Encounter #: \_\_\_\_\_  
 DOB: \_\_\_\_\_  
 Date: \_\_\_\_\_



### PHQ-9 Scores

Baseline:	6 week:	12 week:	24 week:
<input type="checkbox"/> No depression	<input type="checkbox"/> No depression	<input type="checkbox"/> No depression	<input type="checkbox"/> No depression
<input type="checkbox"/> Mild	<input type="checkbox"/> Mild	<input type="checkbox"/> Mild	<input type="checkbox"/> Mild
<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
<input type="checkbox"/> Moderately Severe	<input type="checkbox"/> Moderately Severe	<input type="checkbox"/> Moderately Severe	<input type="checkbox"/> Moderately Severe
<input type="checkbox"/> Severe	<input type="checkbox"/> Severe	<input type="checkbox"/> Severe	<input type="checkbox"/> Severe

PHQ-9 SCORING KEY	
No depression	< 5
Mild	5-9
Moderate	10-14
Moderately Severe	15-19
Severe	20-27

### GAD-7 Scores

Baseline:	6 week:	12 week:	24 week:
<input type="checkbox"/> No anxiety	<input type="checkbox"/> No anxiety	<input type="checkbox"/> No anxiety	<input type="checkbox"/> No anxiety
<input type="checkbox"/> Mild	<input type="checkbox"/> Mild	<input type="checkbox"/> Mild	<input type="checkbox"/> Mild
<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
<input type="checkbox"/> Severe	<input type="checkbox"/> Severe	<input type="checkbox"/> Severe	<input type="checkbox"/> Severe

GAD-7 SCORING KEY	
No anxiety	< 5
Mild	5-9
Moderate	10-14
Severe	15-21

### Suicide Assessment

- No safety concerns at this time
- Concern of harm to self/others including:  
 Thoughts    Plan    Means  
 Intent    Past Attempt(s)
- Protective factors include:  
 Goal-directed behavior    Religious/spiritual beliefs  
 Motivated for treatment    Other: \_\_\_\_\_
- Reviewed case with supervisor and notified PCP

### Medication Adherence:

- N/A – patient not currently prescribed psychotropic medications.
- Patient reports taking psychotropic medication as prescribed.
- Patient reports taking psychotropic medication inconsistently or differently than prescribed.
- Patient denies taking prescribed psychotropic medication secondary to: \_\_\_\_\_
- Patient no longer interested in pharmacotherapy.
- Patient would like to change psychotropic medications due to: \_\_\_\_\_

### Medication Management Recommendations\*

Response	PHQ-9 or GAD-7 score after 4-6 weeks	Treatment Plan	
		Depression	Anxiety
Remission	Score < 5	No treatment change needed. Follow-up again after an additional 4 weeks.	
Partially responsive	Decrease in score but still ≥ 5	Consider increasing dose and continue to increase until max. Then consider augmenting with another antidepressant (i.e., Wellbutrin if currently on an SSRI or possibly Remeron if on SNRI).	Consider increasing dose and continue to increase until max. Then consider augmenting with anti-anxiety (i.e., Buspar, Hydroxyzine, etc.). May add anti-anxiety earlier if very symptomatic.
Non-responsive	Drop ≤ 1 point or increase in score	Consider starting anti-depressant or anti-anxiety (SSRI or SNRI) if receiving therapy alone or increase dose. Review psychological counseling options and preferences.	Consider switching meds (i.e., change SSRI to SNRI) or augmenting with anti-anxiety (i.e., Buspar, Hydroxyzine, etc.). Consider informal or formal psychiatric consultation.

\*Adapted from the HealthTeamWorks and APA Depression Guideline to assist primary care providers in diagnosis and treatment of depression. It is not intended to replace a clinician's judgment or establish a protocol for all patients.

### Therapy Topics Completed

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Getting Going             | <input type="checkbox"/> Manage Stress Better | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Healthy Eating            | <input type="checkbox"/> Mind Tricks for Pain | <input type="checkbox"/> Worrying Less   |
| <input type="checkbox"/> Healthy Relationships     | <input type="checkbox"/> Overcoming Illness   | <input type="checkbox"/> Other: _____    |
| <input type="checkbox"/> Improve Sleep Patterns    | <input type="checkbox"/> Physical Activity    | <input type="checkbox"/> Other: _____    |
| <input type="checkbox"/> Life Changes/Grief & Loss | <input type="checkbox"/> Positive Thinking    |  |

### Program Status

- Active     Disqualified due to: \_\_\_\_\_     Unable to Contact     Drop Out

## Point Improvement (95% CI) in PHQ-9 Score from Baseline

	TCDA	RWJ <u>Intervention</u> Control	p-value
6 Week	6.05 (4.85, 7.26)	2.11 (1.23, 3) 1.71 (0.84, 2.59)	<0.001 <0.001
12 Week	7.26 (5.75, 8.76)	3.31 (2.33, 4.29) 2.13 (1.16, 3.1)	<0.001 <0.001
24 Week	6.52 (4.51, 8.53)	4.07 (3.03, 5.1) 3.33 (2.3, 4.36)	0.036 0.006

# TCDA Impact on Utilization

Measure	Intervention (m= 219)	Control (m=40)
# of Hospitalizations	B) 575/1000/year A) 342/1000/year	275/1000/year 500/1000/year
# of ED visits	B) 680/1000/year A) 656/1000/year	1025/1000/year 1100/1000/year
# of PCP visits	B) 6.03/year A) 5.67/year	5.15/year 4.31/year

## TCDA: Combining Telephonic Calls with Technology

- Automated between visit outreach
  - Complementary educational videos
  - Homework reporting
  - Symptom tracking
  - Motivational messaging
  - Patient stories
- Automated Post Program outreach
  - PHQ9, GAD7 with responses based on results
  - Motivational messaging
  - Helpful tips
- Access to myStrength (a behavioral health website)













# IMPROVE YOUR HEALTH

Do not write in this box

**1) IF YOU HAVE FILLED THIS OUT BEFORE:**

- I would like to update my health goal (select below)
- I am still working on my previous goal (select below)

**2) Please check () ONE health goal you might want to work on:**

<input type="checkbox"/> <b>Taking my medication</b> 	<input type="checkbox"/> <b>Dealing with pain</b> 
<input type="checkbox"/> <b>Eating Healthy</b> 	<input type="checkbox"/> <b>Reducing alcohol or drug abuse</b> 
<input type="checkbox"/> <b>Quitting/reducing smoking</b> 	<input type="checkbox"/> <b>Dealing with depression</b> 
<input type="checkbox"/> <b>Being more active</b> 	<input type="checkbox"/> <b>Reducing Stress/Anxiety</b> 
<input type="checkbox"/> <b>My Health goal is not listed, I would like to work on:</b> <hr style="border: 0; border-top: 1px solid black; margin-top: 5px;"/>	

**3) Circle the letter for the sentence that best describes you:**

- A) I have not started and do not intend to start working on this health goal in the next six months
- B) I have not started, but I intend to start working on this health goal in the next 30 days
- C) I have a plan or I am ready to start working on this health goal
- D) I have recently started working on this health goal

**4) Please check how we can help you:**

- I am not ready to work on this goal right now
- I would like a handout
- I would like to work with a behavior change expert
  - In the clinic
  - On the telephone



Thank you for filling out this form



# The Free Health Behavior Improvement Program

A program designed specifically for Denver Health patients

## How It Works:

### A. Choose A Health Behavior

Reduce Stress, Depression or Anxiety

Lose Weight

Quit Smoking

Reduce Alcohol or Street Drug Use

### B. Choose How To Participate



In-Clinic



Telephonic



Online

### C. Complete Tasks

Brief Health Surveys

View Online Articles, Video and Audio

### D. Earn Entries Into Prize Drawings



Target Gift Card



Amazon Gift Card



iPad

[How Do I Participate?](#)

Healthcare Professionals: [Learn More About How RxAssurance Can Work For You](#)

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Engineered at High Altitude  
in scenic Denver, Colorado, USA

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**123456**

Doe, John

barcode

GOAL

Reducing  
alcohol or  
street  
drug use

PERSONAL  
IMPORTANCE

**8**

1-10 Scale

PERSONAL  
CONFIDENCE

**4**

1-10 Scale

PROGRAMS

In-Clinic  
Telephonic

CONTACTS

Email  
Phone

MONITORING

**Yes**

# PCP Role: Tips

## Provide support

- *“It’s really great that you picked (patient’s goal). Is there anything you feel I can do to help you with this goal?”*

## Reinforce benefits

- *“I agree that working on this goal will help you to (mention benefits patient selected).”*
- *“Are there any other ways you think you might benefit from (patient’s goal).”*
- Mention other possible benefits as appropriate.

## Increase confidence

- Discuss things patient feels will help him/her feel more confident
- *“What might make (patient’s goals) hard for you?”*
  - *“How do you feel you might be able to overcome this barrier?”*
  - Ask if patient would be interested in hearing your suggestions.

## Closer

- *“You will be getting a text message or email in the next day or two so we can get a baseline assessment of where you are now with your (patient’s goal) and then monthly brief assessment to check on your progress. Please make sure you complete these assessments so I will be able to keep up to date on how you are doing.”*
- *“The next time I see you let me know if there is anything else I can do to help you with (patient’s goals).”*

**123456**

Doe, John

barcode

## GOAL

## Reducing alcohol or street drug use

### Improve Your Health Assessment History

Question	01/01/2015 (Baseline)	02/01/2015	03/01/2015	04/01/2015
Participation	N/A	N	Y	Y
Program Helpful	N/A	-	Y	Y
Improve Behavior	N/A	-	N	Y
Importance	7	6	7	8
Health Benefits	I feel better I feel better about myself	I feel better	I feel better I feel better about myself	I feel better I feel better about myself
Confidence	5	6	6	7
Help Areas	Learning ways to avoid alcohol or drug use when I am under stress Learning where I can go for help	Learning where I can go for help	Learning ways to avoid alcohol or drug use when I am under stress Learning where I can go for help	Learning ways to avoid alcohol or drug use when I am under stress

### Assessments

Assessment	01/01/2015 (Baseline)	02/01/2015	03/01/2015	04/01/2015
PHQ-9	6	2	1	2

# Ideal Integrated Care System

- Automated pre-visit screening via Improve Your Health
  - Depression
  - Anxiety
  - Substance abuse
  - Other behavioral risk factors
- Treatment choices guided by Shared Decision Making Tool
  - Medications
  - Therapy
    - Location
      - In clinic
      - Over the phone
    - Type of Therapy
  - Watchful waiting
    - With self management support vice DVD, printed materials etc.
- Between visit care through automated outreach
- Use of navigators to maintain patient engagement and track outcomes

## Conclusion

- Program development is an iterative process
- Repeated funding from the Robert Wood Johnson Foundation and the Colorado Health Foundation have enabled us to use technology to continue to innovate and improve behavioral health outcomes at Denver Health.

# Thank you!

David Brody, MD

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303.602.2192





# Question?

Please type your question into the Chat Box or press  
\*6 to unmute your phone line and ask a question