Empathic Change: Applications of Human-Centered Design in VHA Research

Katie Tirtanadi, MSIS, MHA, MA

Meg Moldestad, MS

Seattle-Denver VA Center of Innovation, Seattle, WA

University of Washington Department of Human-Centered Design and Engineering, Seattle, WA

Sarah Javier, PhD

Ashley Griffin, PhD

Center for Innovation to Implementation (Ci2i), VA Palo Alto Healthcare System, Menlo Park, CA

Stanford University School of Medicine, Stanford, CA

Disclaimer

The contents of this presentation do not represent the views of the Department of Veterans Affairs or the United States government.

Funding Information

1) The material in this presentation is based upon work supported by the Department of Veterans Affairs, Pain/Opioid CORE rapid funding start opportunity (PIs: Griffin and Javier).

2) This material is based upon work supported by the Department of Veterans Affairs, Veterans Health Administration, Office of Research and Development, Health Services Research and Development (IK2HX002866) and by an NIMH R03 from the University of Washington ALACRITY Center (P50 MH115837) (Tirtanadi).

Poll Q1 – What is your level of experience with human-centered design?

- I've never heard of it
- I've heard of it, but that's about it
- I've used it outside HSR&D (e.g., software development)
- I **informally** use some human-centered or other design practices in my work
- I **formally** use human-centered or other design methods in my work
- I would call myself an expert

Agenda

- Human-centered design (HCD) overview
- Case studies
  - Patient Readiness for Improvement through Motivation, Engagement and Decision-making for PTSD (PRIMED)
  - Rapid Prototyping of Messages to Engage Veterans with Psychosocial Treatments for Chronic Pain
- Things to keep in mind when doing HCD in VA HSR&D research

What is Human-Centered Design

"An approach to interactive systems that aims to make systems usable and useful by focusing on the users, their needs and their requirements"

-National Institute of Standards and Technology

Problem-solving grounded in Empathy

HCD and Qualitative Research

Think about how and where these disciplines align

Health Research

Evaluative

"What is going on?"

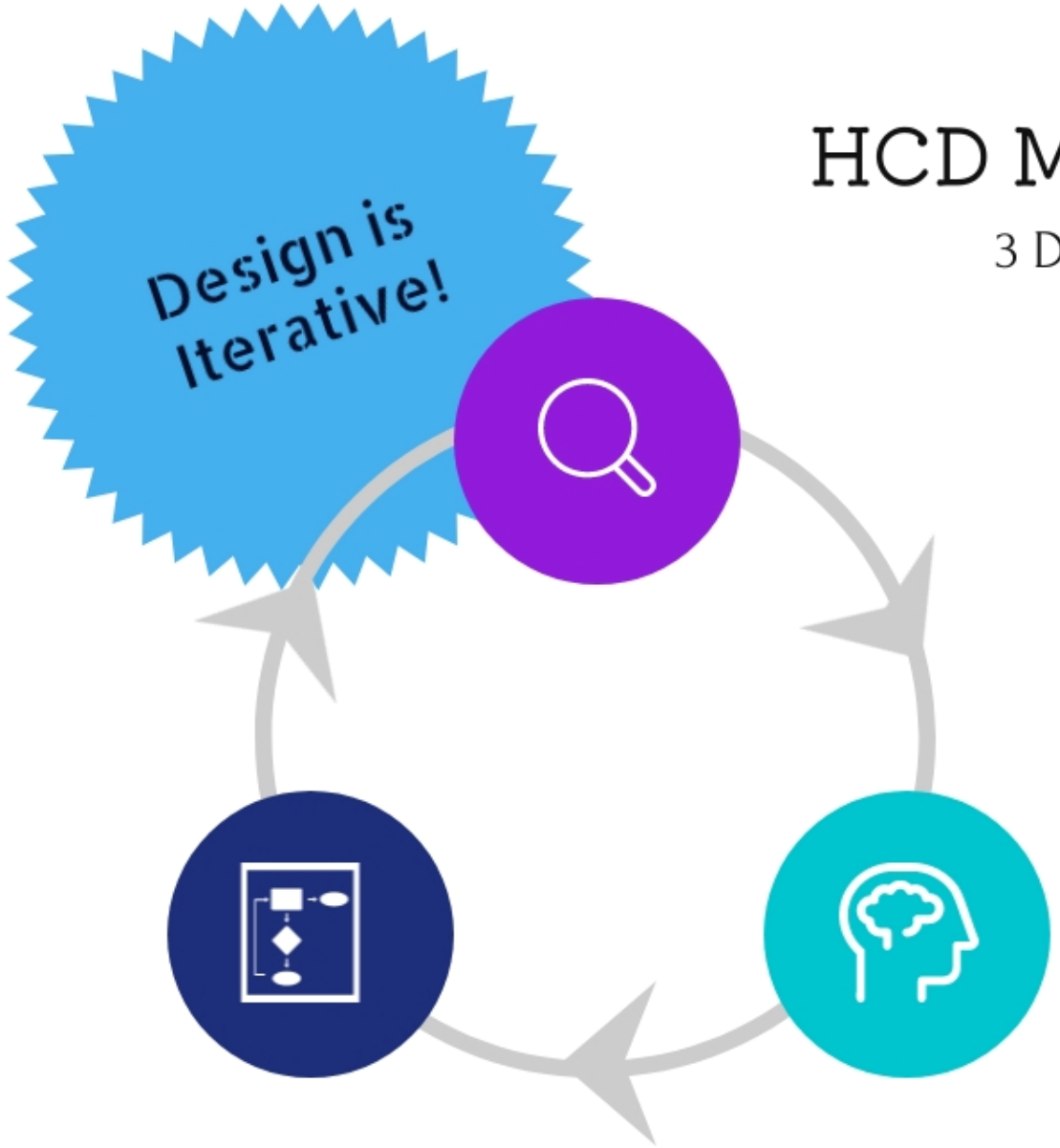
Human-centered Design

Problem-solving

"How can we fix it?"

HCD Methodology

3 Distinct Phases



DISCOVER

What's going on?

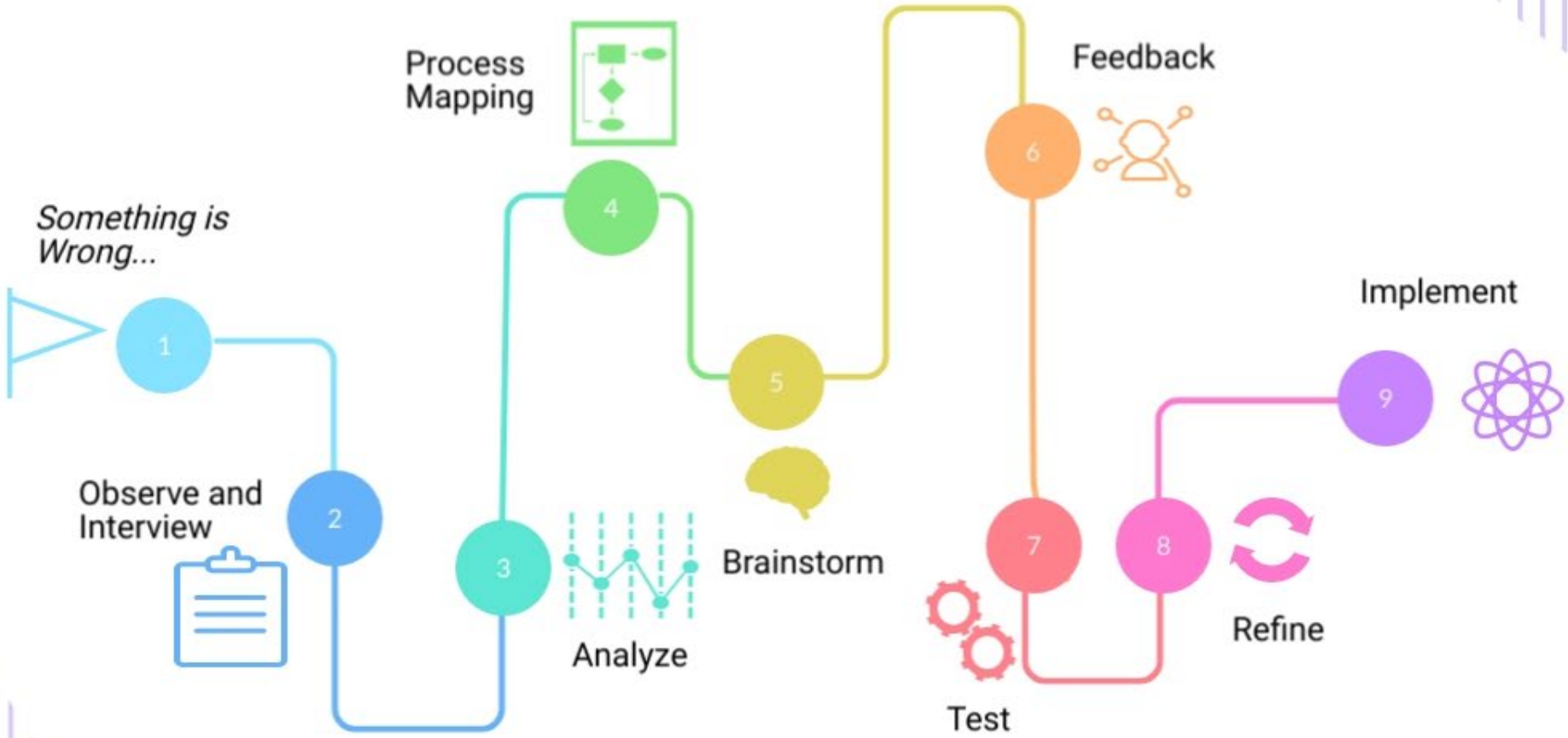
IDEATION

What can we do about it?

IMPLEMENTATION

Does this really solve the problem?

Life of a Design Project



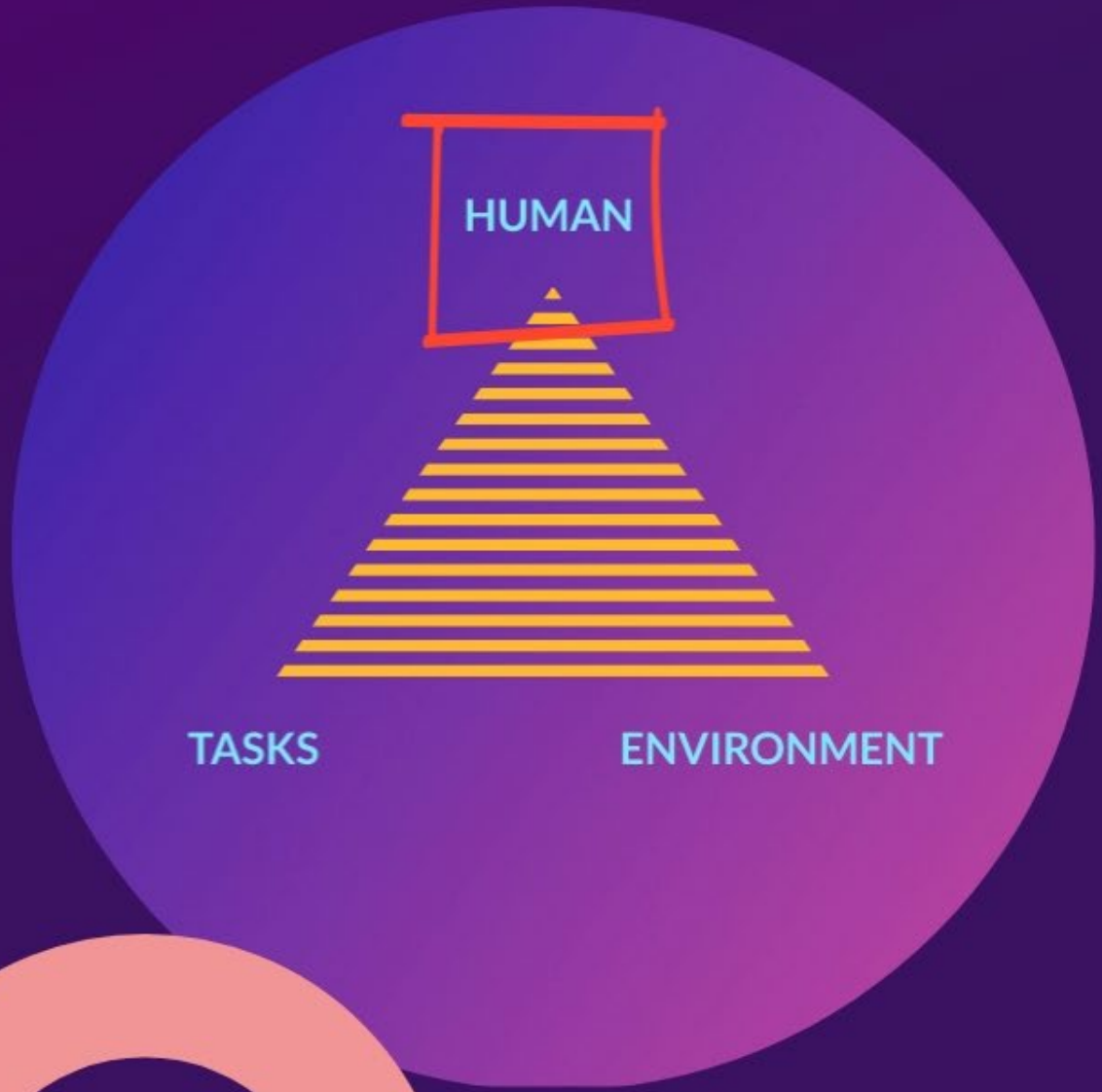
Key Principles of HCD

- Explicit understanding of users, tasks and environments
- Users are involved throughout the entire process, from design and development to implementation
- Design is iterative and refined by user-centered evaluation
- Design looks at the whole user experience
- Design employs multi-disciplinary skills and perspectives

Finding Solutions

Design is Change

Solutions are tailored to problems.
HCD is not solution-driven.
The Product is your vehicle to make change happen.



Journey of a Qual + Design Project

Health Services Research	Human-Centered Design
Project Prep	Stakeholder Engagement
Research Aim	
Interviews & Observations	Learn about Users, Tasks and Systems
	Identify the Problem
	Brainstorming
Coding & Analysis	Prototypes & User Feedback
Determine Findings	Solution Implementation
Dissemination	
	Follow up Evaluation

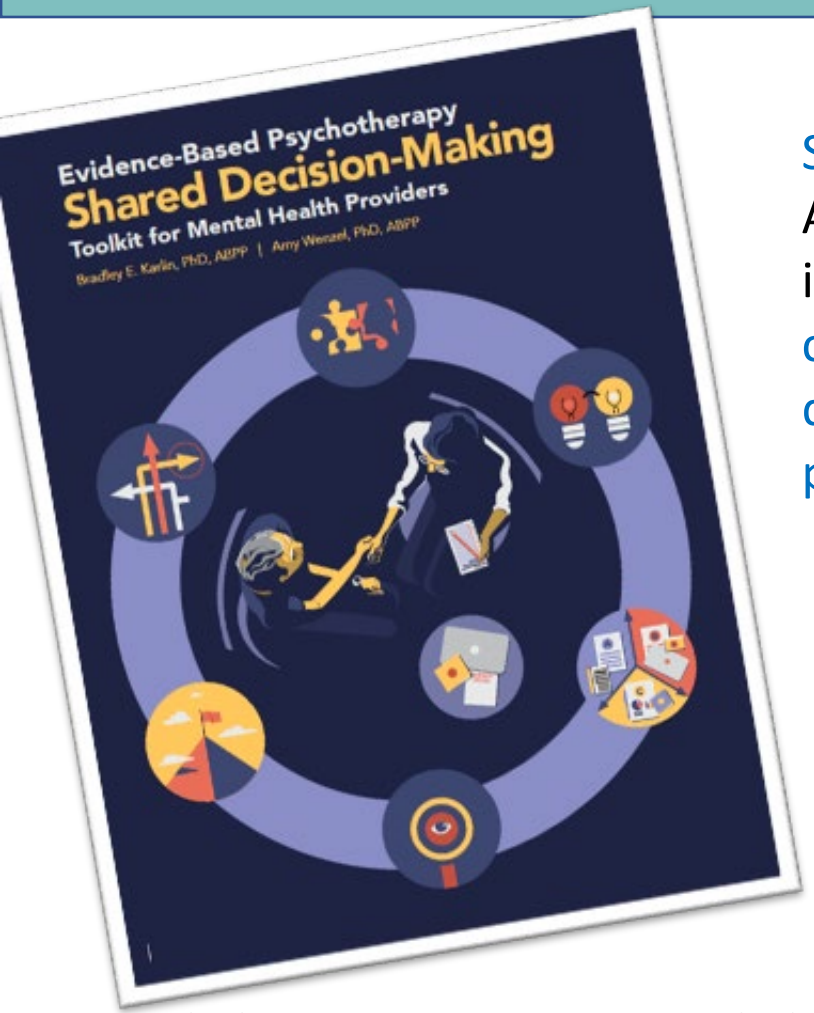
PATIENT READINESS FOR IMPROVEMENT THROUGH MOTIVATION, ENGAGEMENT AND DECISION-MAKING FOR PTSD (PRIMED)

PI: Jessica Chen, PhD

Health Systems Engineer: Katie Tirtanadi, MSIS, MHA, MA

BACKGROUND

SHARED-DECISION MAKING



Shared-decision making (SDM)
A health communication intervention that supports collaborative treatment decision making between a patient and a provider.

A patient-centered, evidence-based practice that increases patient knowledge and satisfaction and improves treatment retention,[1,2] including in mental health care.[3,4]

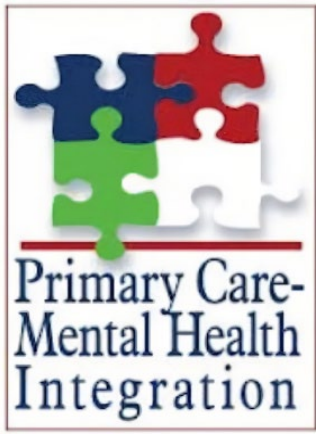
SDM may improve the uptake of EBPIs in mental health by promoting interest/demand, patient knowledge, and motivation for treatment.[5]

1. Stacey, Légaré, Lewis, Barry, Bennett, Eden, et al. 2017; 2. Légaré, Stacey, Turcotte, Cossi, Kryworuchko, Graham, et al. 2014; 3. Zisman-Ilani, Barnett, Harik, Pavlo & O'Connell 2017; 4. Drake 2018; 5. Karlin & Brenner 2020

PRIMARY CARE SETTING

Integrated Behavioral Health Care

Design Environment: Initial Mental Health Visit for PTSD Patients



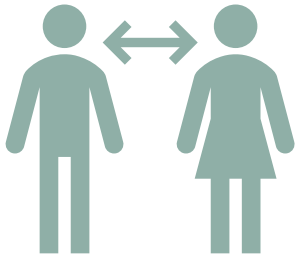
- Population-Based
- Evidence-Based
- Brief Visits
- Transitions/ "Handoffs"
- Patient & Family Engagement

A Framework for Measuring Integration of Behavioral Health and Primary Care | The Academy (ahrq.gov)

DISCOVER

USABILITY ISSUES

Shared-Decision Making isn't happening



A decision aid alone does not meet patients' need for trust and interpersonal connection

Education takes too long for patients, requires motivation and access to online resources

SDM takes too long for providers to do in-session and learn out-of-session

DISCOVER

3 major areas to investigate

I. Understand where SDM lives within the visit (Functional Assessment)

II. Boil down SDM into its smallest, active components

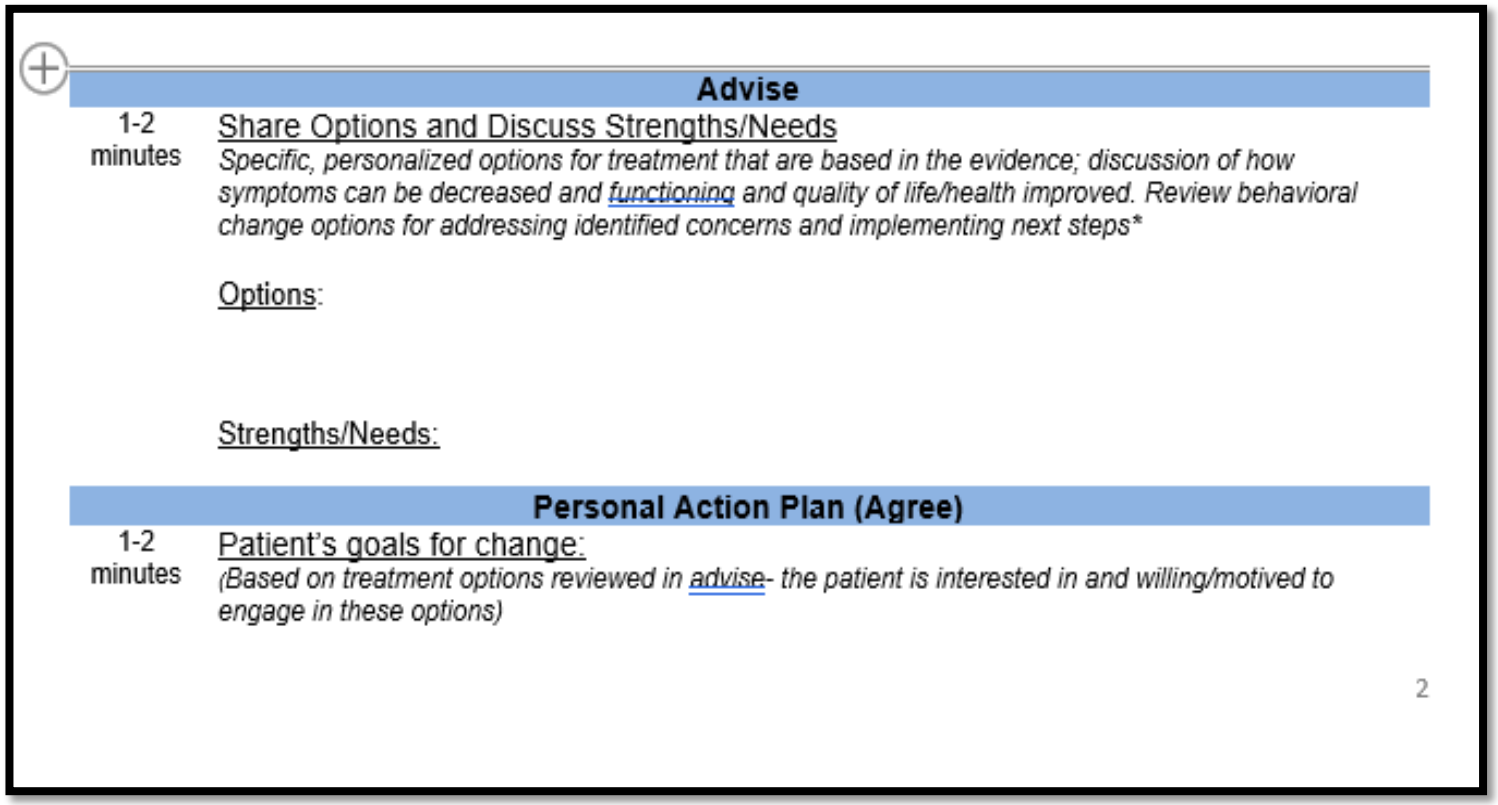
III. Find the best vehicle to deliver change (to encourage and accept SDM into practice)

WAVE 1

Learn the Functional Assessment

- Interviews with project experts and participants
- Walkthrough of the visit
- CCC Training Tool

Only 3-4 mins devoted to patient discussion



Advise

1-2 minutes — Share Options and Discuss Strengths/Needs

*Specific, personalized options for treatment that are based in the evidence; discussion of how symptoms can be decreased and functioning and quality of life/health improved. Review behavioral change options for addressing identified concerns and implementing next steps**

Options:

Strengths/Needs:

Personal Action Plan (Agree)

1-2 minutes — Patient's goals for change:

(Based on treatment options reviewed in advise- the patient is interested in and willing/motived to engage in these options)

2

BARRIERS

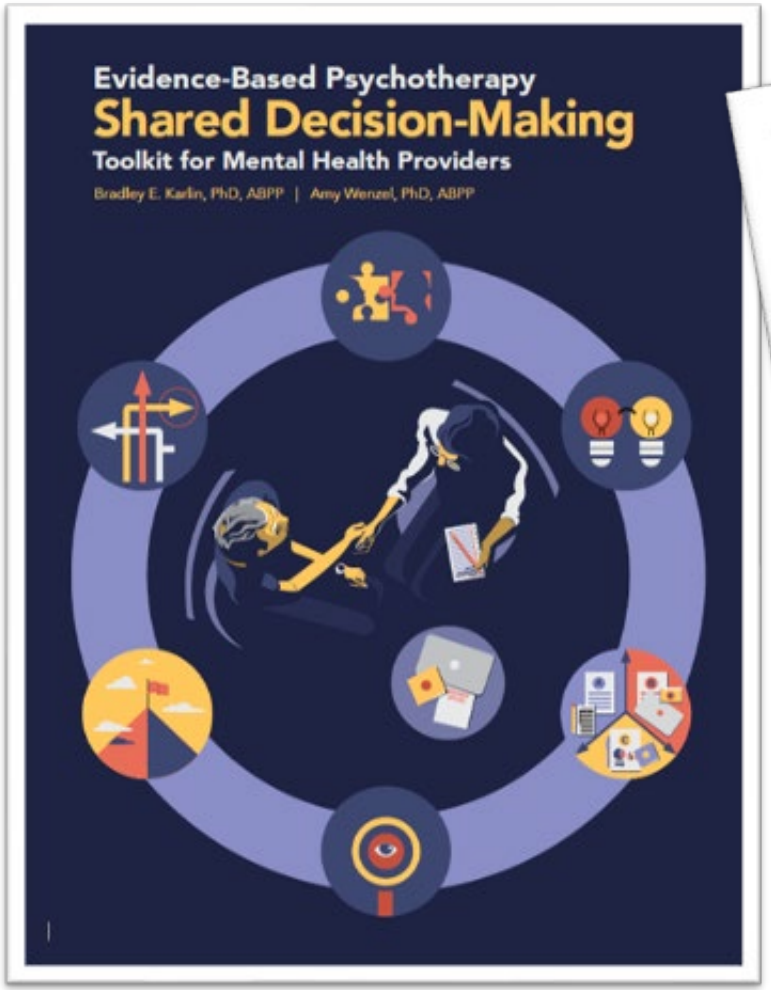
Knowledge

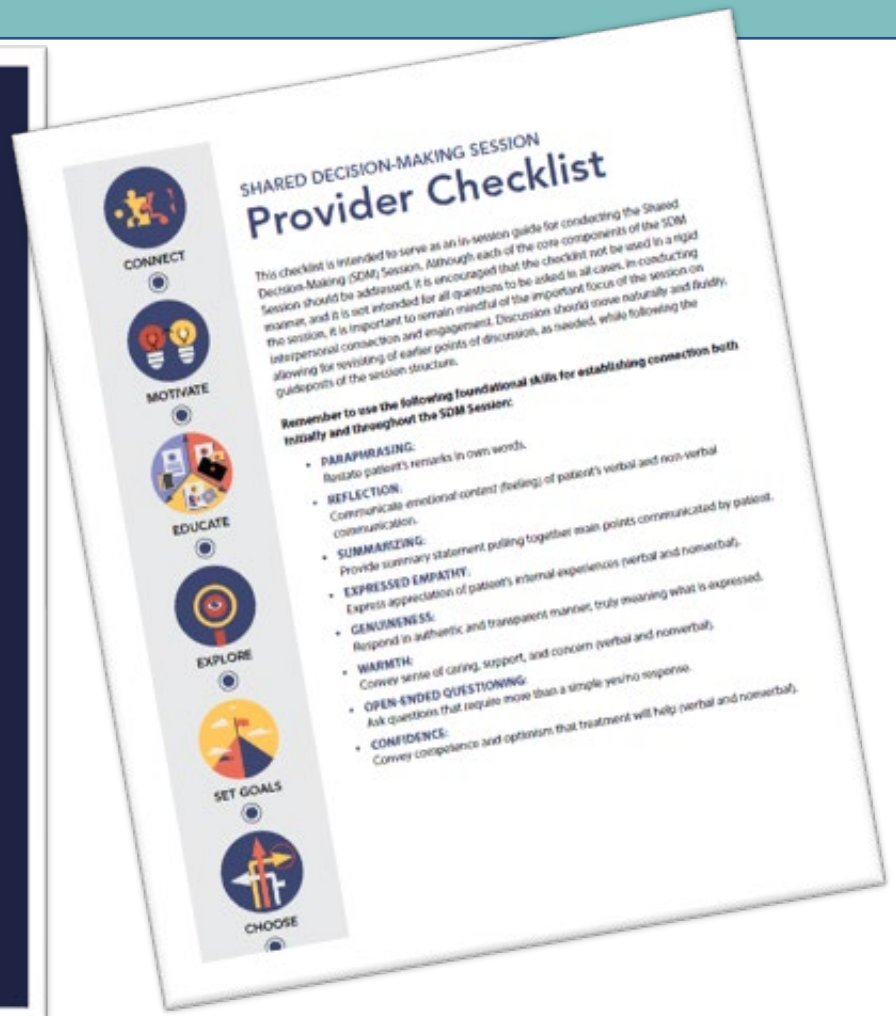
Clinicians weren't sure of SDM and whether they were using it

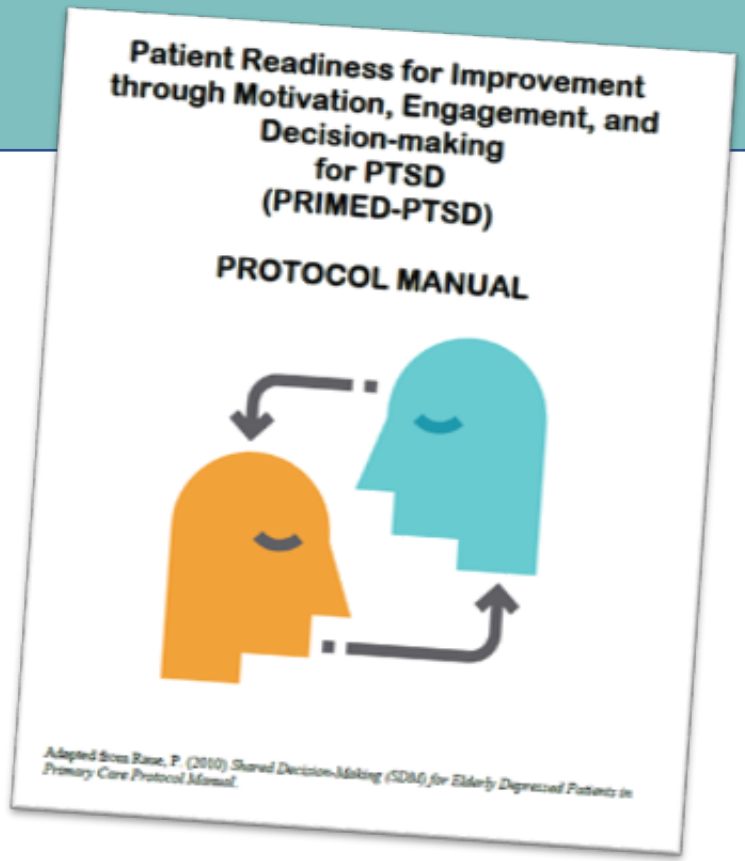
Time

Unable to provide more time in the visit for patient discussion

DISTILLING SDM







What makes SDM, SDM?

VISIT FRAMEWORK

Shared Decision-Making - Visit Framework

A new approach for PTSD conversations built on Patient Engagement

Connect – *"Welcome. Today we're here to talk about PTSD treatment options. The goal is to find an option that works best for you and what you want."*

"Before we move forward with our discussion, is there anything you want to make sure we talk about?"

1. Build rapport with the patient.
2. Develop interpersonal connection. Build trust, establishing strong relationship
3. Must be an interested, caring and concerned ally

Preparation – *"In terms of making decisions, we aim for a shared approach. This means that you, the patient, will ultimately decide what plan you want. I am here to guide you and provide information about each option but you will decide what you want to do. Does that sound ok with you?"*

1. Determine how prepare the patient is for shared decision-making.
2. Reiterate that they will take an active role in deciding their treatment path.
3. Answers will determine if patient is prepared to move to next steps

Motivate – *"First, please tell me why you are seeking treatment?"*

"Can you tell me about any past experiences you (or someone you know) has had with PTSD treatment?"

"Can you also tell me what would be important to you in terms of a treatment plan?"

1. Determine underlying motivations with inquisitive, empathic, non-directive questions.
2. Explore their attitudes and beliefs about different treatments
3. Look for stereotypes as described by the patient.
4. LISTEN AND WATCH EXPRESSIONS.
5. Listen for *Change Talk* – verbal indicators that patient is unhappy. Ask for elaboration and provide space to embrace all aspects of change talk. These topics initiate from the patient, not provider.
6. The Motivate discussion will determine the degree to which a patient is willing to engage – both consciously and subconsciously.

Educate – *"Based on what we've been discussing I will outline some options that may appeal to you."*

1. The provider identifies treatment options in line with patient's motivations as discussed above.
2. The goal is to provide personally relevant treatment information, individualized to enable INFORMED CHOICE.
3. Educate re logistics of these options so patient will have all necessary information to make the best choice for themselves.

Explore – *"With a treatment plan, what does the future look like to you?"*

1. Want the patient to detail their personal values, vision and beliefs
2. Discuss how these come into play when making decisions (might move this to earlier).

Set Goals (Related to Explore) - *"Is there a PTSD treatment we've discussed that you believe will help you reach that vision of the future?"*

"What goals can we set that can help with this journey?"

1. Apply treatment options to their vision of the future and discuss the variations.
2. What goals can they set for themselves. Look for meaningful steps and activities that are important to individual patient.
3. Provider also needs to assess goals for viability and guide patient towards reasonable, attainable milestones within treatment context.

Choose – *"How do you feel about making a decision right now?"*

"Is there a treatment option you want to move forward with?

1. Sometimes the patient will need to discuss options with their support system
2. Create a plan to return to this conversation if no decision is made.
3. Detail next steps if patient makes a treatment decision.
4. This is a joint effort. Revisit the plan whenever either side feels it needs to be revised and create space to discuss why this could happen.

1-Pager for SDM Process

CONNECT

PREPARATION

MOTIVATE

EDUCATE

EXPLORE

SET GOALS

CHOOSE

DESIGN & BUILD

WHY A TEMPLATE?

Visit Framework

Design Constraints and Barriers

Time Constraints & Motivation
+
No Increased Work Burden

Project Parameter

Is there a step in the process we can change?

Design in Reality

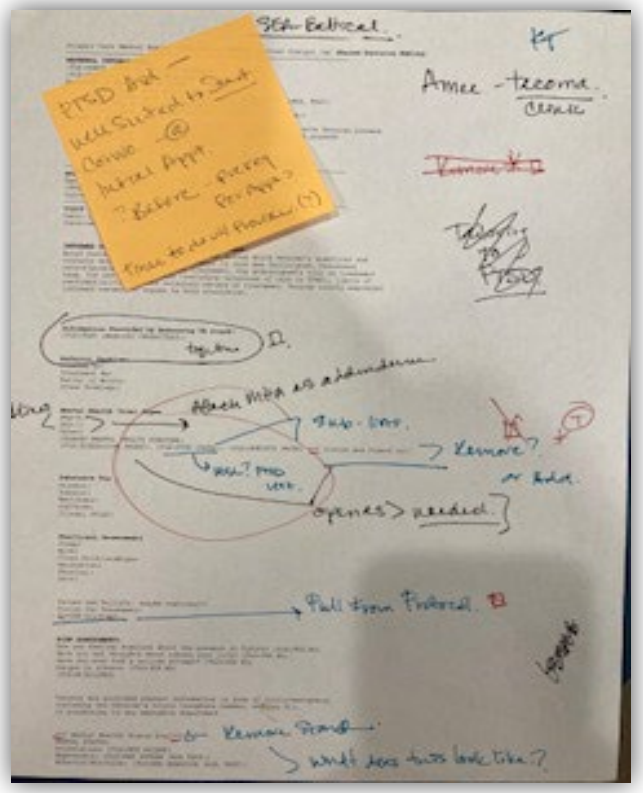
Education Component

2° Requirement

VISIT TEMPLATE

DESIGN & BUILD: WAVE 2

Imagine how the visit should go.



From Structured Agenda to First Prototype

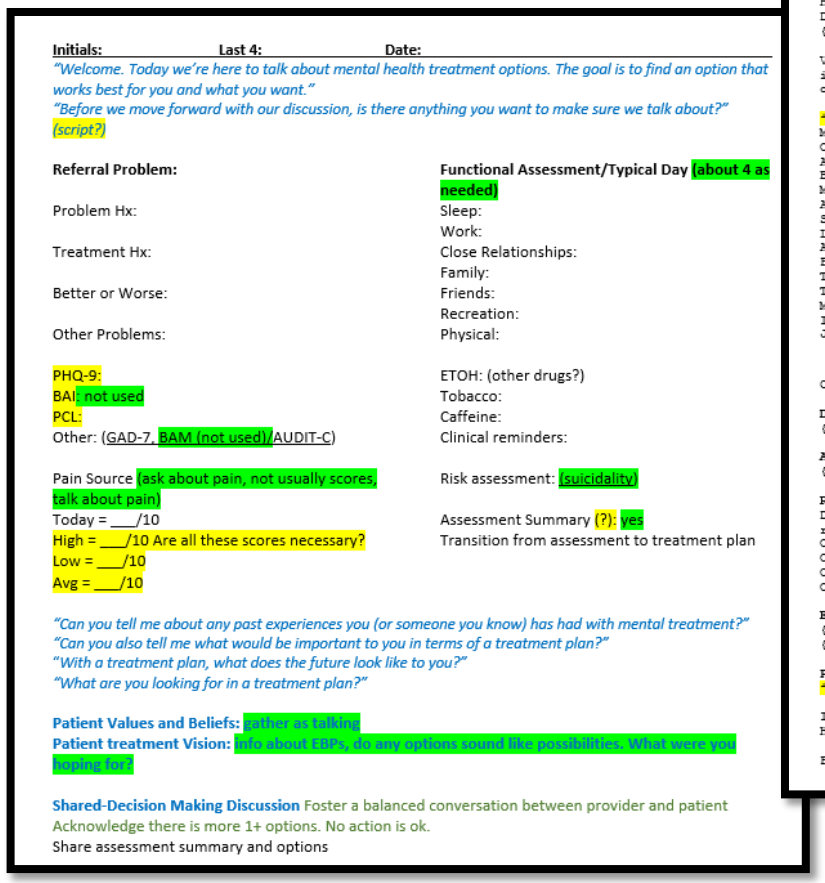
Motivate and Explore: *"Can you tell me about any past experiences you (or someone you know) has had with mental treatment?"*
"Can you also tell me what would be important to you in terms of a treatment plan?"
"With a treatment plan, what does the future look like to you?"
"What are you looking for in a treatment plan?"

Patient Values and Beliefs: (bubble explanation)
Patient treatment Vision:

Shared-Decision Making Discussion Foster a balanced conversation between provider and patient
Acknowledge there is more 1+ options. No action is ok.
Share assessment summary and options

Option 1:	Option 2:	Options 3:
Document option and patient thoughts		

ITERATE & REFINE



Initials: **Last 4:** **Date:**

"Welcome. Today we're here to talk about mental health treatment options. The goal is to find an option that works best for you and what you want."
"Before we move forward with our discussion, is there anything you want to make sure we talk about?"
(script?)

Referral Problem:

Problem Hx:

Treatment Hx:

Better or Worse:

Other Problems:

PHQ-9:
BAI: not used
PCL:
Other: (GAD-7, BAM (not used),AUDIT-C)

Pain Source (ask about pain, not usually scores, talk about pain)
Today = ___/10
High = ___/10 Are all these scores necessary?
Low = ___/10
Avg = ___/10

Functional Assessment/Typical Day (about 4 as needed)
Sleep:
Work:
Close Relationships:
Family:
Friends:
Recreation:
Physical:

ETOH: (other drugs?)
Tobacco:
Caffeine:
Clinical reminders:

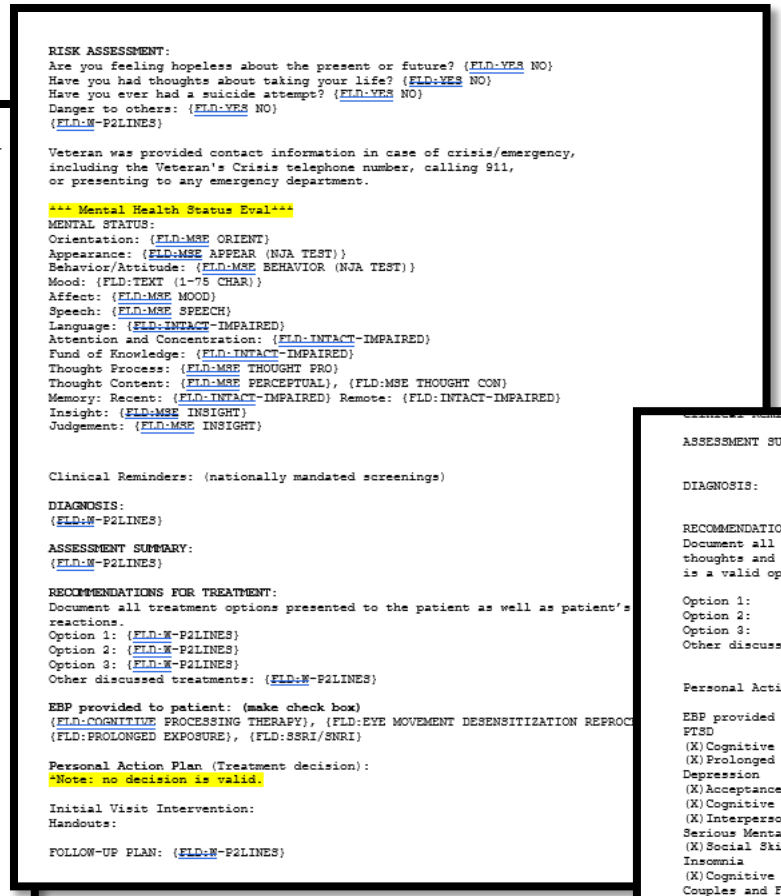
Risk assessment: (suicidality)

Assessment Summary (?): yes
Transition from assessment to treatment plan

"Can you tell me about any past experiences you (or someone you know) has had with mental treatment?"
"Can you also tell me what would be important to you in terms of a treatment plan?"
"With a treatment plan, what does the future look like to you?"
"What are you looking for in a treatment plan?"

Patient Values and Beliefs: gather as talking
Patient treatment Vision: Info about EBPs, do any options sound like possibilities. What were you hoping for?

Shared-Decision Making Discussion Foster a balanced conversation between provider and patient
Acknowledge there is more 1+ options. No action is ok.
Share assessment summary and options



RISK ASSESSMENT:
Are you feeling hopeless about the present or future? {FLD:YES NO}
Have you had thoughts about taking your life? {FLD:YES NO}
Have you ever had a suicide attempt? {FLD:YES NO}
Danger to others: {FLD:YES NO}
{FLD:M-P2LINES}

Veteran was provided contact information in case of crisis/emergency, including the Veteran's Crisis telephone number, calling 911, or presenting to any emergency department.

*** Mental Health Status Eval***
MENTAL STATUS:
Orientation: {FLD:MSE ORIENT}
Appearance: {FLD:MSE APPEAR (NJA TEST)}
Behavior/Attitude: {FLD:MSE BEHAVIOR (NJA TEST)}
Mood: {FLD:TEXT (1-75 CHAR)}
Affect: {FLD:MSE MOOD}
Speech: {FLD:MSE SPEECH}
Language: {FLD:INTACT-IMPAIRED}
Attention and Concentration: {FLD:INTACT-IMPAIRED}
Fund of Knowledge: {FLD:INTACT-IMPAIRED}
Thought Process: {FLD:MSE THOUGHT PRO}
Thought Content: {FLD:MSE PERCEPTUAL}, {FLD:MSE THOUGHT CON}
Memory: Recent: {FLD:INTACT-IMPAIRED} Remote: {FLD:INTACT-IMPAIRED}
Insight: {FLD:MSE INSIGHT}
Judgement: {FLD:MSE INSIGHT}

Clinical Reminders: (nationally mandated screenings)

DIAGNOSIS:
{FLD:M-P2LINES}

ASSESSMENT SUMMARY:
{FLD:M-P2LINES}

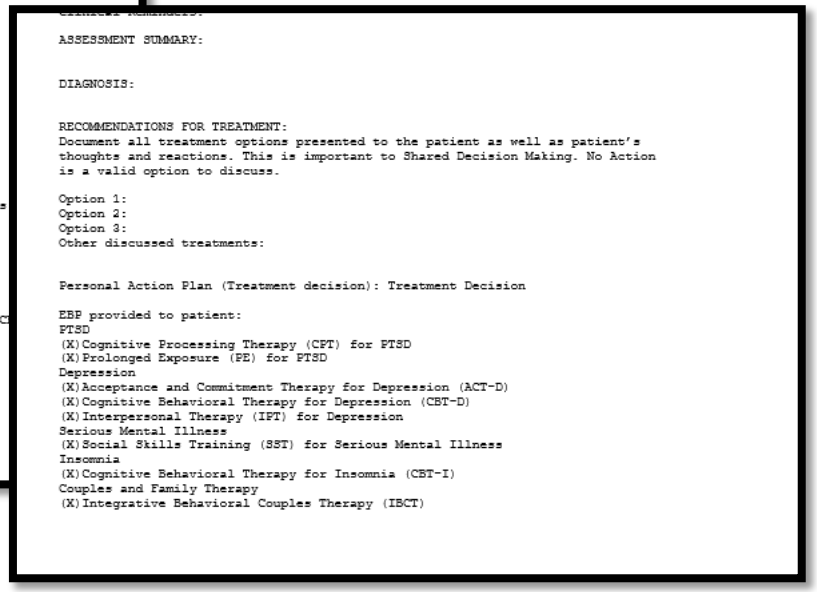
RECOMMENDATIONS FOR TREATMENT:
Document all treatment options presented to the patient as well as patient's reactions.
Option 1: {FLD:M-P2LINES}
Option 2: {FLD:M-P2LINES}
Option 3: {FLD:M-P2LINES}
Other discussed treatments: {FLD:M-P2LINES}

EBP provided to patient: (make check box)
{FLD:COGNITIVE PROCESSING THERAPY}, {FLD:EYE MOVEMENT DESENSITIZATION REPROC
{FLD:PROLONGED EXPOSURE}, {FLD:SSRI/SNRI}

Personal Action Plan (Treatment decision):
*Note: no decision is valid.

Initial Visit Intervention:
Handouts:

FOLLOW-UP PLAN: {FLD:M-P2LINES}



ASSESSMENT SUMMARY:

DIAGNOSIS:

RECOMMENDATIONS FOR TREATMENT:
Document all treatment options presented to the patient as well as patient's thoughts and reactions. This is important to Shared Decision Making. No Action is a valid option to discuss.

Option 1:
Option 2:
Option 3:
Other discussed treatments:

Personal Action Plan (Treatment decision): Treatment Decision

EBP provided to patient:
PTSD
(X)Cognitive Processing Therapy (CPT) for PTSD
(X)Prolonged Exposure (PE) for PTSD
Depression
(X)Acceptance and Commitment Therapy for Depression (ACT-D)
(X)Cognitive Behavioral Therapy for Depression (CBT-D)
(X)Interpersonal Therapy (IPT) for Depression
Serious Mental Illness
(X)Social Skills Training (SST) for Serious Mental Illness
Insomnia
(X)Cognitive Behavioral Therapy for Insomnia (CBT-I)
Couples and Family Therapy
(X)Integrative Behavioral Couples Therapy (IBCT)

- Removed Scripts
- Added Links to Resources
- Streamlined Initial Info
- Checks (not free text) for faster documentation

TEST

TEST: WAVE 3

Documentation of Shared Decision Making (SDM)
SDM promotes informed choice via patient engagement. It requires strong interpersonal connection, which is essential for creating trust within the therapist-patient relationship. Above all, the role of the therapist is to be viewed as an interested, caring and concerned ally who is inquisitive, empathic and non-directive.

Values and beliefs as stated by patient: {FLD:W-P4LINES}
Describe the motivation for treatment: {FLD:W-P4LINES}

A small number of veterans will not seek an active role in the SDM process.

ASSESSMENT SUMMARY: {FLD:W-P4LINES}
DIAGNOSIS: {FLD:W-P2LINES}

Document all treatment options presented to the patient as well as patient's thoughts and reactions. This is important to Shared Decision Making. No Action is a valid option to discuss.

Option 1: {FLD:W-P4LINES}
Option 2: {FLD:W-P4LINES}
Option 3: {FLD:W-P4LINES}
Other discussed treatments: {FLD:W-P4LINES}

TREATMENT RECOMMENDATIONS BASED UPON ASSESSMENT:
Veteran was provided information about several treatment options helpful for addressing current mental health concerns.

EBPs recognized by VA: https://www.mentalhealth.va.gov/get-help/treatment/ebt.asp
EBPs on Treatment Works for Vets: https://www.treatmentworksforvets.org/

Personal Action Plan (Treatment decision): {FLD:W-P4LINES}
Intervention provided for this visit:
- ☐ Primary Care Mental Health classes
  - ☐ Depression
    - ☐ Acceptance and Commitment Therapy for Depression (ACT-D)
    - ☐ Behavioral Activation (BA)
    - ☐ Cognitive Behavioral Therapy for Depression (CBT-D)
    - ☐ Interpersonal Therapy (IPT) for Depression
    - ☐ Problem Solving Therapy (PST) for Depression
  - ☐ Insomnia
    - ☐ Cognitive Behavioral Therapy for Insomnia (CBT-I)
  - ☐ Chronic Pain
    - ☐ Cognitive Behavioral Therapy for Chronic Pain (CBT-CP)
  - ☐ Substance Use
    - ☐ Cognitive Behavioral Therapy for Substance Use Disorders (CBT-SUD)

Participants used template for visit documentation

Final version included in CPRS Catalog

SUMMARY

You don't know where you're going to end up

The PRIMED Study

Provider-centered design to support better conversations and decision-making with veterans.

Vehicle for Change: documentation template.

Rapid Prototyping of Messages to Engage Veterans with Psychosocial Treatments for Chronic Pain

PIs: Ashley Griffin, PhD and Sarah Javier, PhD
Center for Innovation to Implementation, VA Palo Alto Healthcare System
Stanford University School of Medicine

Psychosocial Treatments for Chronic Pain

- Evidence-based non-pharmacological approaches are the first line of treatment for chronic pain at the VA (VA Opioid Therapy for Chronic Pain Work Group, 2017)
- Non-pharmacological approaches include treatments that address the psychological (e.g., stress, self-efficacy) and social (e.g., social support, access to resources) aspects of pain:
  - Cognitive Behavioral Therapy for Chronic Pain
  - Acceptance and Commitment Therapy
  - Mindfulness-Based Stress Reduction

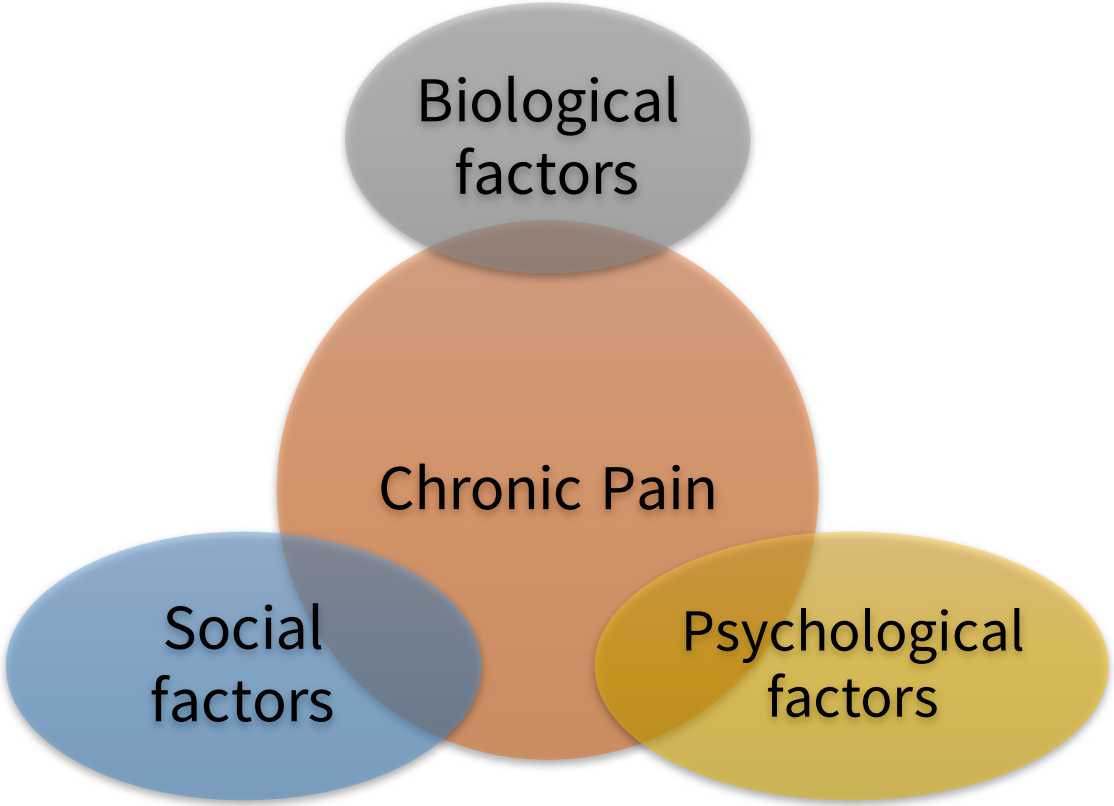
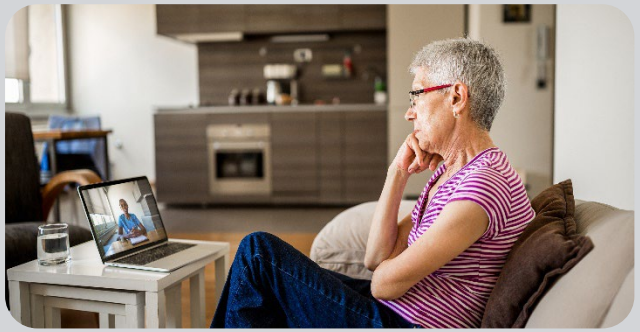


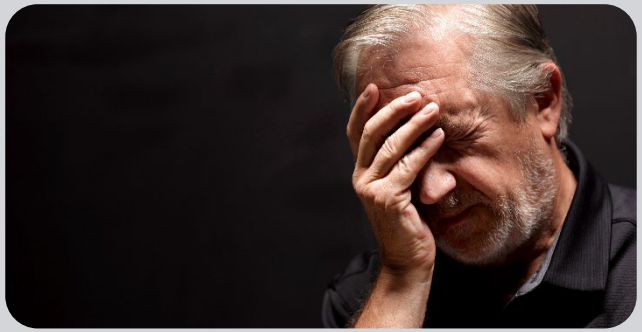
Figure 1.
Biopsychosocial model of chronic pain
(Gatchel, Peng, Peters, Fuchs, & Turk, 2007)

Psychosocial Treatments for Chronic Pain



Cognitive Behavioral Therapy for Chronic Pain
(CBT-CP; Murphy, McKellar, Raffa, et al.)

Structured therapeutic approach that focuses on altering the relationships between one's thoughts, feelings, and behaviors



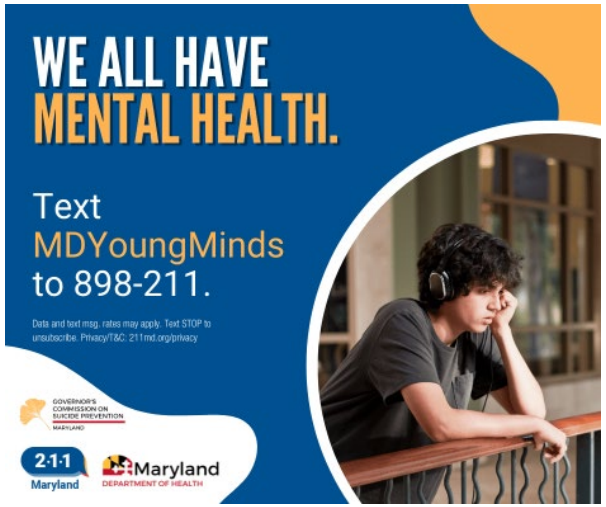
Acceptance and Commitment Therapy
(ACT; Hayes, Strosahl, & Wilson)

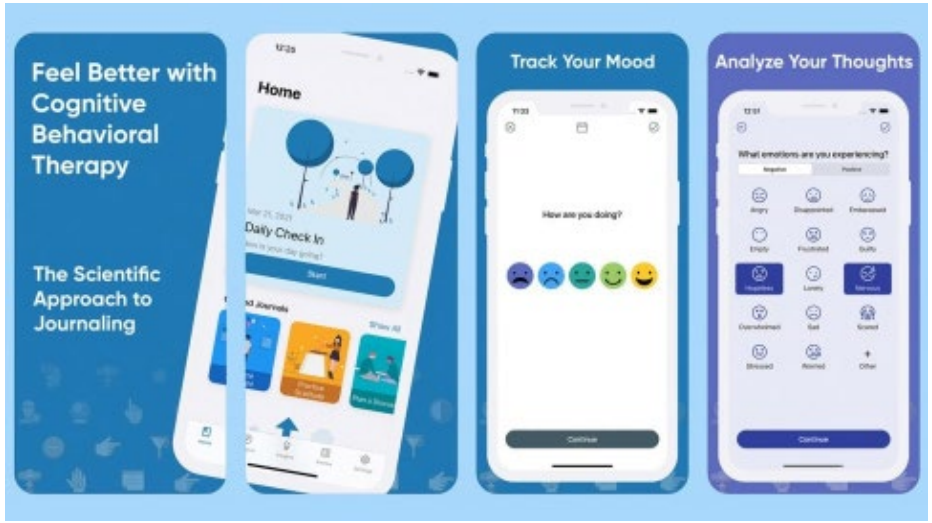
Action-oriented approach where one focuses on being present, acceptance, personal values, commitment to pursuing important life goals, "self-as-context", and defusion of negative thoughts

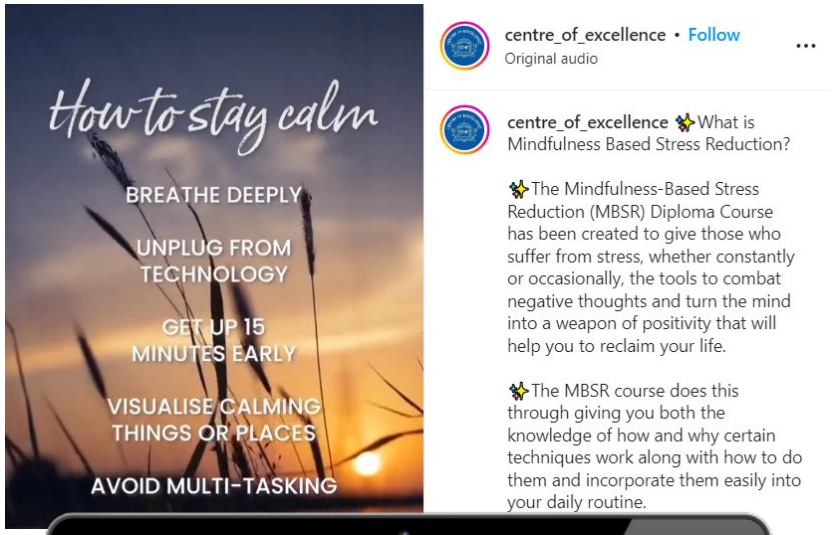
Mindfulness-Based Stress Reduction
(MBSR; Kabat-Zinn)

Flexible therapeutic approach combining mindfulness meditation and yoga to decrease stress and stressful thoughts

Technology: A Conduit for Targeted Health Information







Everyday Tips For Mental Health

by Tejas Suthar

★★★★☆ 29

Free to Enable

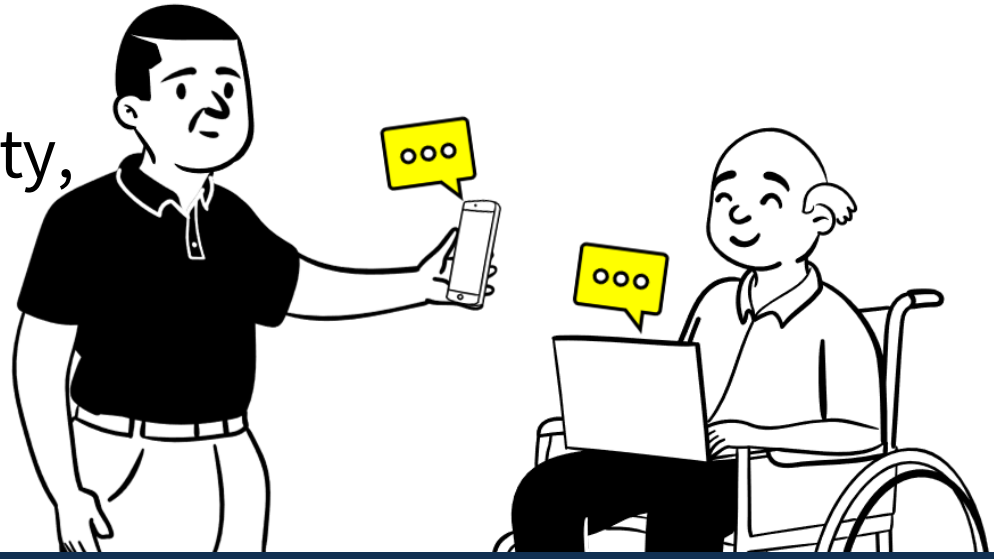
"Alexa open mental health tips"

"Alexa ask mental health tips show latest mental health tip"

Shown in: English (US) See all supported languages

Technology-Based Interventions

- Patient messaging systems (e.g., portals, text messaging) are promising modalities to disseminate health information
- Support improved knowledge of treatments, self-management, and shared decision-making
- Little is known about patients' perspectives and preferences for message content, modality, timing, and impact on pain-related communication with the care team

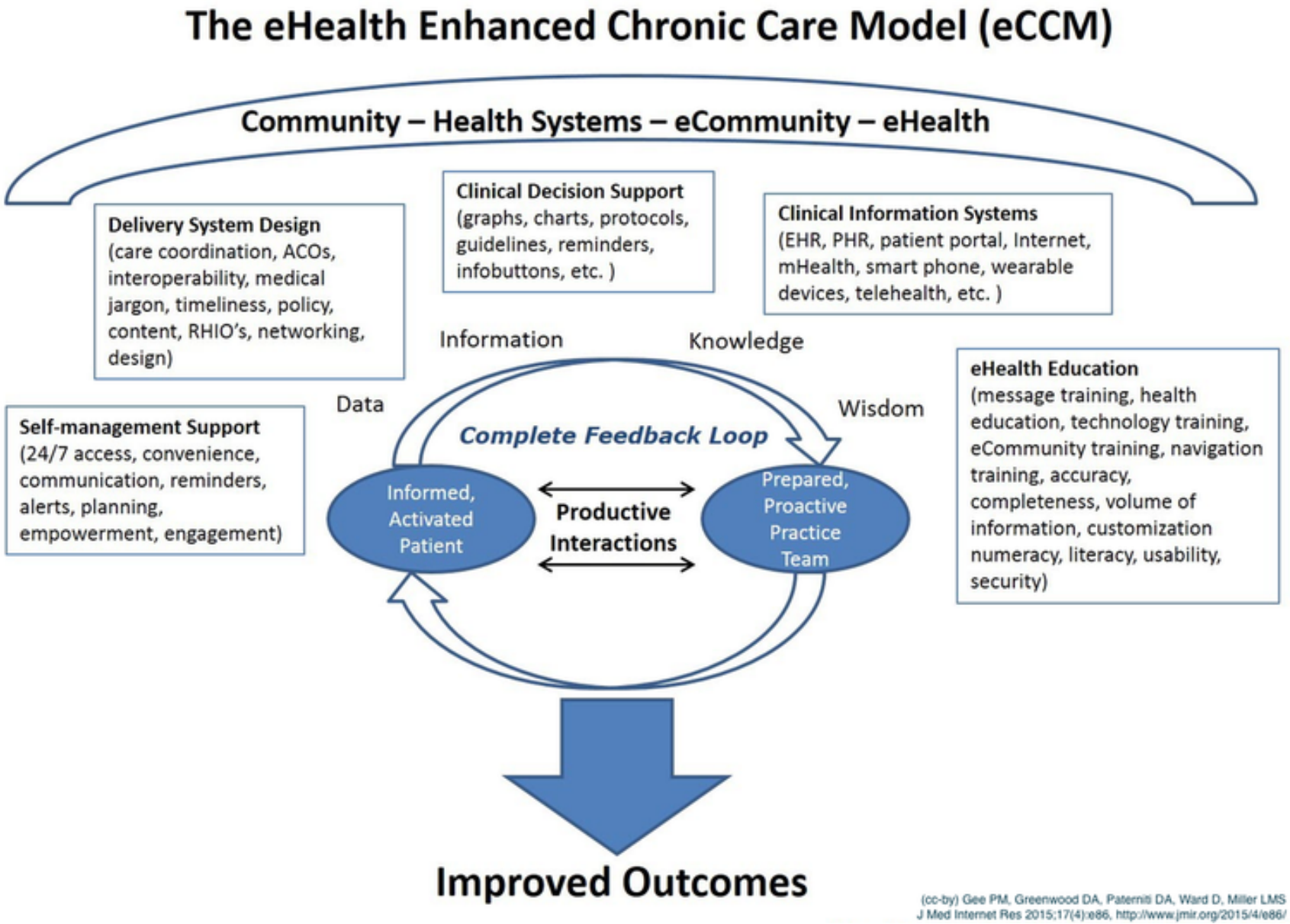


Study Overview

- This is a study funded by the VA Pain/Opioid CORE rapid start funding opportunity
- **Purpose:** Develop messages on psychosocial treatments for chronic pain and obtain feedback on aspects that are valuable to Veterans
- **Approach:**
  - Aim 1. Utilize user-centered, rapid prototyping to refine messages that promote engagement in nonpharmacological behavioral therapies for chronic pain
  - Aim 2. Examine preferences regarding the modality and timing of communication and perceived impact of proactive messages for psychological approaches to chronic pain

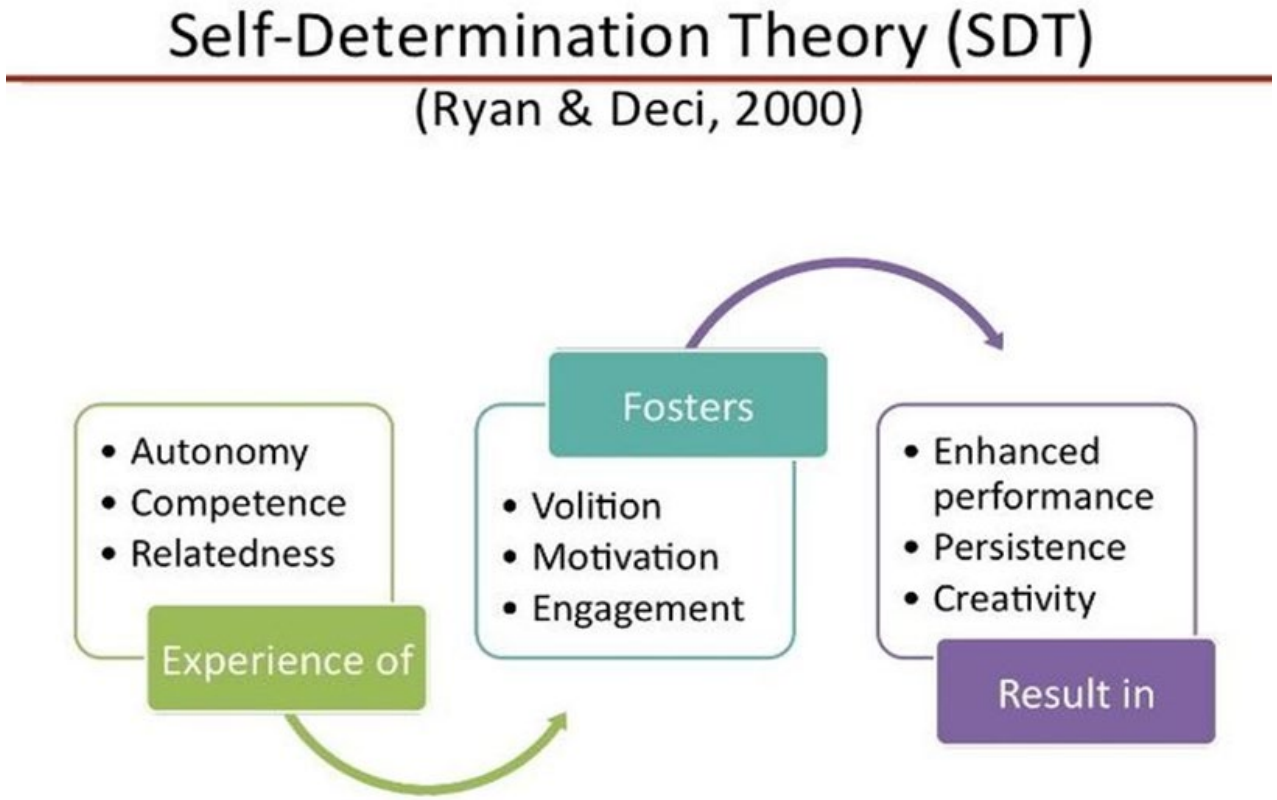
Health Technology Framework

- Illustrates how eHealth tools can help patients improve management of chronic disease
- Used constructs from eCCM to inform broader vision of this work



Message Content Framework

- Guided by Self-Determination Theory
- **All humans have three basic psychological needs:** Autonomy, competence, and relatedness
- **Our study question:** *How* do we foster the experiences of these psychological needs to motivate individuals to talk to providers and engage with psychosocial pain treatments?



Motivation and Behavior Change Techniques Used in SDT Interventions

Used motivation and behavior change techniques to guide language in the messages

- Autonomy-support techniques
- Relatedness-support techniques
- Competence support techniques

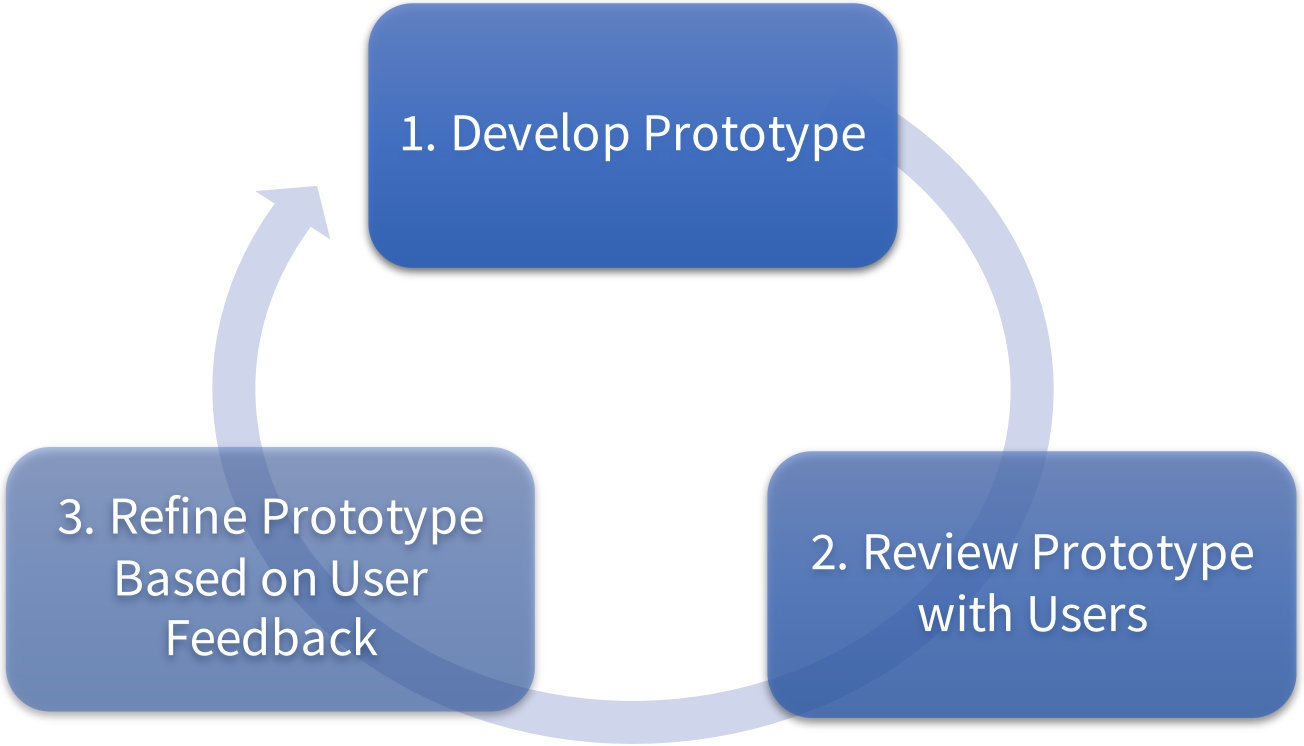
Table 1. (excerpt) Classification of Motivation and Behavior Change Techniques (MBCT)

Label	Definition	Function description
Autonomy-Support Techniques		
MBCT 3. Use non-controlling, informational language	Use informational, non-judgmental language that conveys freedom of choice, collaboration, and possibility when communicating (avoiding constraining, pressuring, or guilt-inducing language). For example, use "might" or “could” instead of "should” and “must”.	Avoids being a source of pressure or creating internal pressure, countering external locus of causality for actions.

Teixeira P, et al (2020). A Classification of Motivation and Behavior Change Techniques Used in Self-Determination Theory-Based Interventions in Health Contexts. *Motivation Science*. 6(4):438-455.

Study Design Approach: Rapid Prototyping

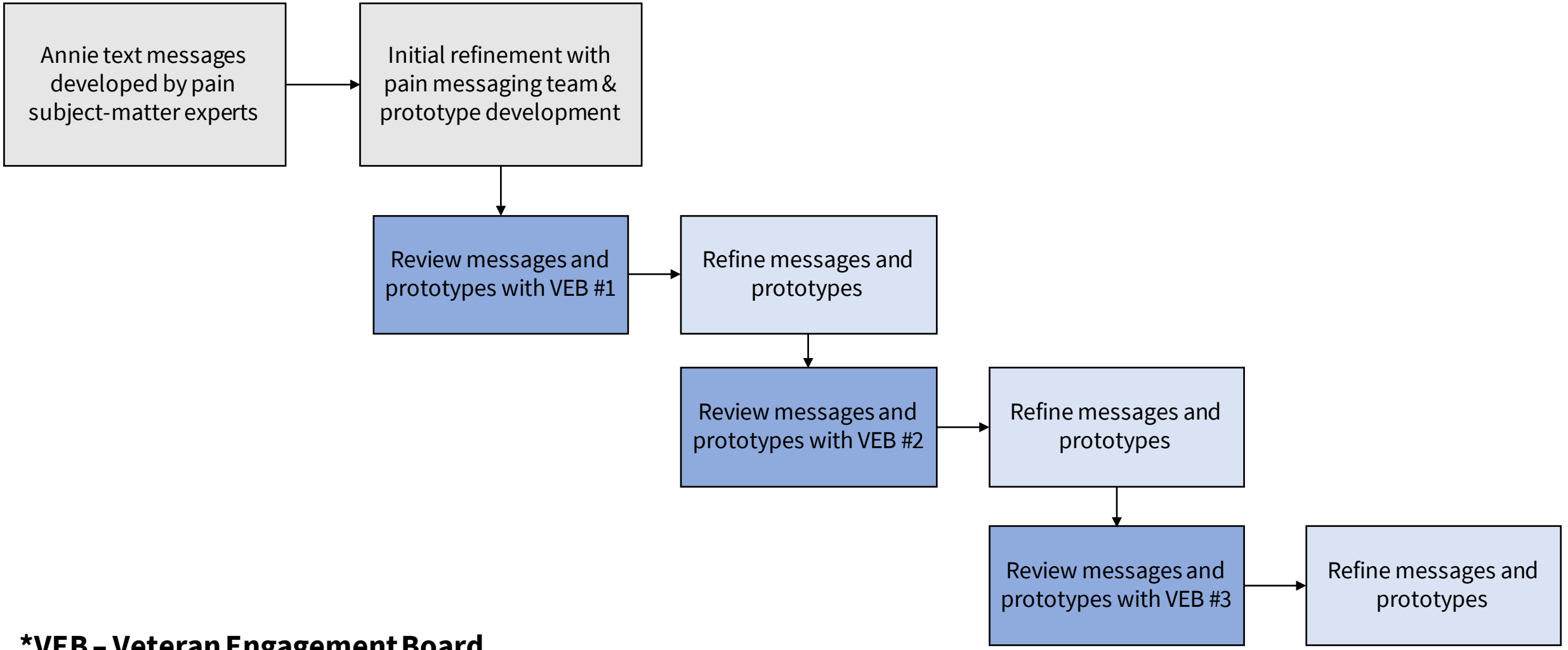
What is it? An evaluative, iterative approach typically used early in a design process that allows individuals to rapidly test and refine a prototype to be used by some target end-user



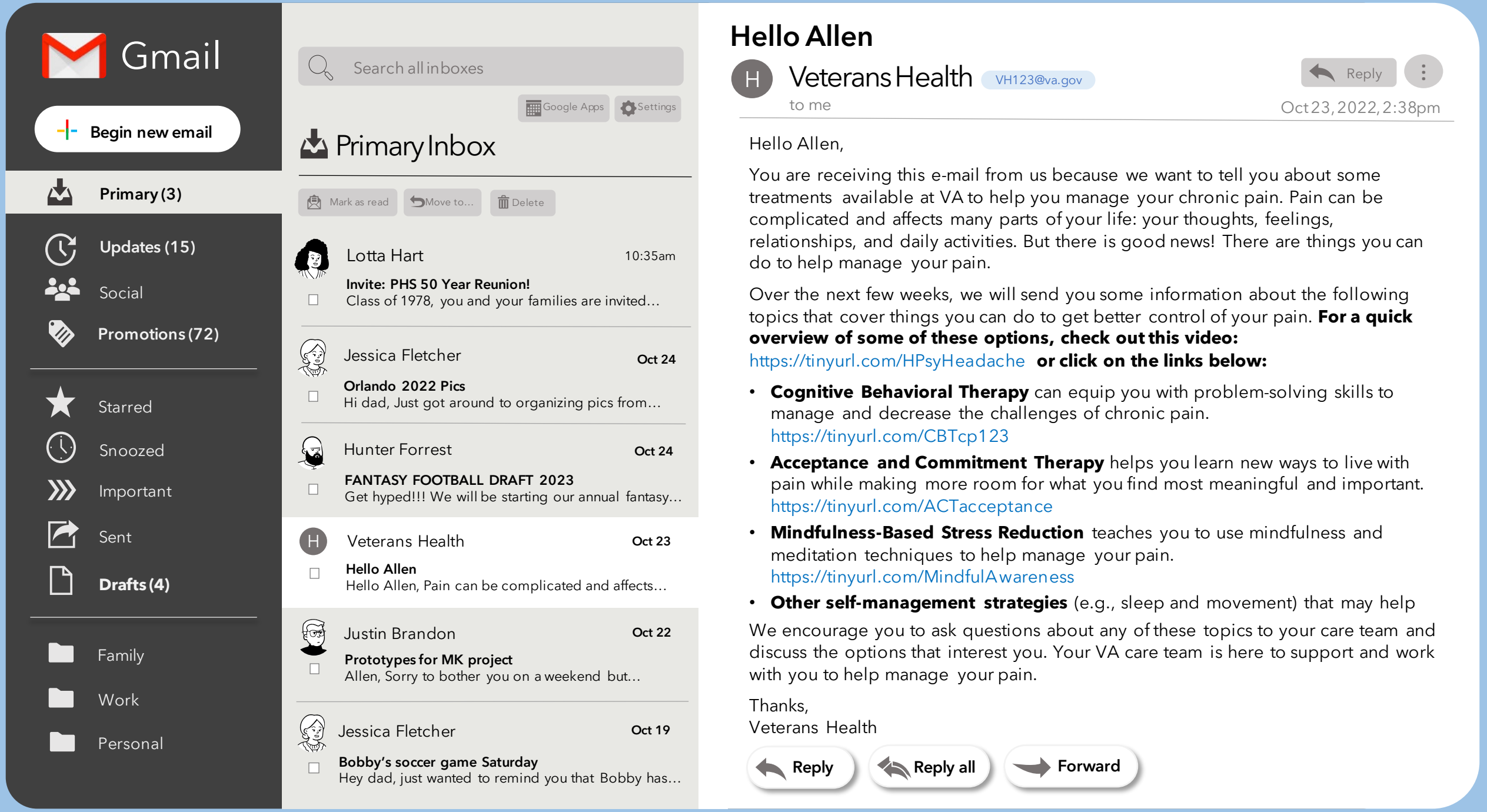
Rapid Prototyping

Pros	Cons
• Inexpensive to create prototype • Fast process • Provides test user with an idea of what an end-product will look like and be like • Effective application can be used to identify problems with a product early on	• Early prototypes may have low fidelity (i.e., low realism) compared to what an end-product will be

Rapid Prototyping Process (Aim 1)



***VEB – Veteran Engagement Board**


Gmail
Begin new email
Primary (3)
Updates (15)
Social
Promotions (72)
Starred
Snoozed
Important
Sent
Drafts (4)
Family
Work
Personal
Search all inboxes
Google Apps
Settings
Primary Inbox
Mark as read
Move to...
Delete
Lotta Hart 10:35am
Invite: PHS 50 Year Reunion!
Class of 1978, you and your families are invited...
Jessica Fletcher Oct 24
Orlando 2022 Pics
Hi dad, Just got around to organizing pics from...
Hunter Forrest Oct 24
FANTASY FOOTBALL DRAFT 2023
Get hyped!!! We will be starting our annual fantasy...
Veterans Health Oct 23
Hello Allen
Hello Allen, Pain can be complicated and affects...
Justin Brandon Oct 22
Prototypes for MK project
Allen, Sorry to bother you on a weekend but...
Jessica Fletcher Oct 19
Bobby's soccer game Saturday
Hey dad, just wanted to remind you that Bobby has...
Hello Allen
Veterans Health VH123@va.gov
to me
Reply
Oct 23, 2022, 2:38pm
Hello Allen,
You are receiving this e-mail from us because we want to tell you about some treatments available at VA to help you manage your chronic pain. Pain can be complicated and affects many parts of your life: your thoughts, feelings, relationships, and daily activities. But there is good news! There are things you can do to help manage your pain.
Over the next few weeks, we will send you some information about the following topics that cover things you can do to get better control of your pain. For a quick overview of some of these options, check out this video: https://tinyurl.com/HPsyHeadache or click on the links below:
• Cognitive Behavioral Therapy can equip you with problem-solving skills to manage and decrease the challenges of chronic pain. https://tinyurl.com/CBTcp123
• Acceptance and Commitment Therapy helps you learn new ways to live with pain while making more room for what you find most meaningful and important. https://tinyurl.com/ACTacceptance
• Mindfulness-Based Stress Reduction teaches you to use mindfulness and meditation techniques to help manage your pain. https://tinyurl.com/MindfulAwareness
• Other self-management strategies (e.g., sleep and movement) that may help
We encourage you to ask questions about any of these topics to your care team and discuss the options that interest you. Your VA care team is here to support and work with you to help manage your pain.
Thanks,
Veterans Health
Reply
Reply all
Forward

View Message

Next

Reply | Move Message to… | Move | Print | Close

From	VETERANS HEALTH	02 Feb 2022 @ 1041 ET
To	WRENCH, ALLEN	
Subject	CBT for chronic pain	
Message ID	8675309	

Message

Hello Allen,

Cognitive Behavioral Therapy for chronic pain (CBT-CP) is a treatment offered at most VA medical centers. CBT-CP is a widely studied and supported psychological treatment for chronic pain. It is based on decades of research and has helped both Veterans and civilians. The approaches learned in CBT-CP may help you do more of the things you would like to do. It will help make pain feel less overwhelming.

CBT-CP consists of a "meet-and-greet" session and 10 therapy sessions with a provider. You can choose to do these sessions in the clinic or from the comfort of your home with most VA providers.

If you decide to participate in CBT-CP, you will be asked to:

- Attend sessions weekly, if possible
- Describe how pain impacts your life
- Work together with your provider to set treatment goals
- Learn about chronic pain and ways to help improve your pain
- Practice new skills in your life outside of sessions

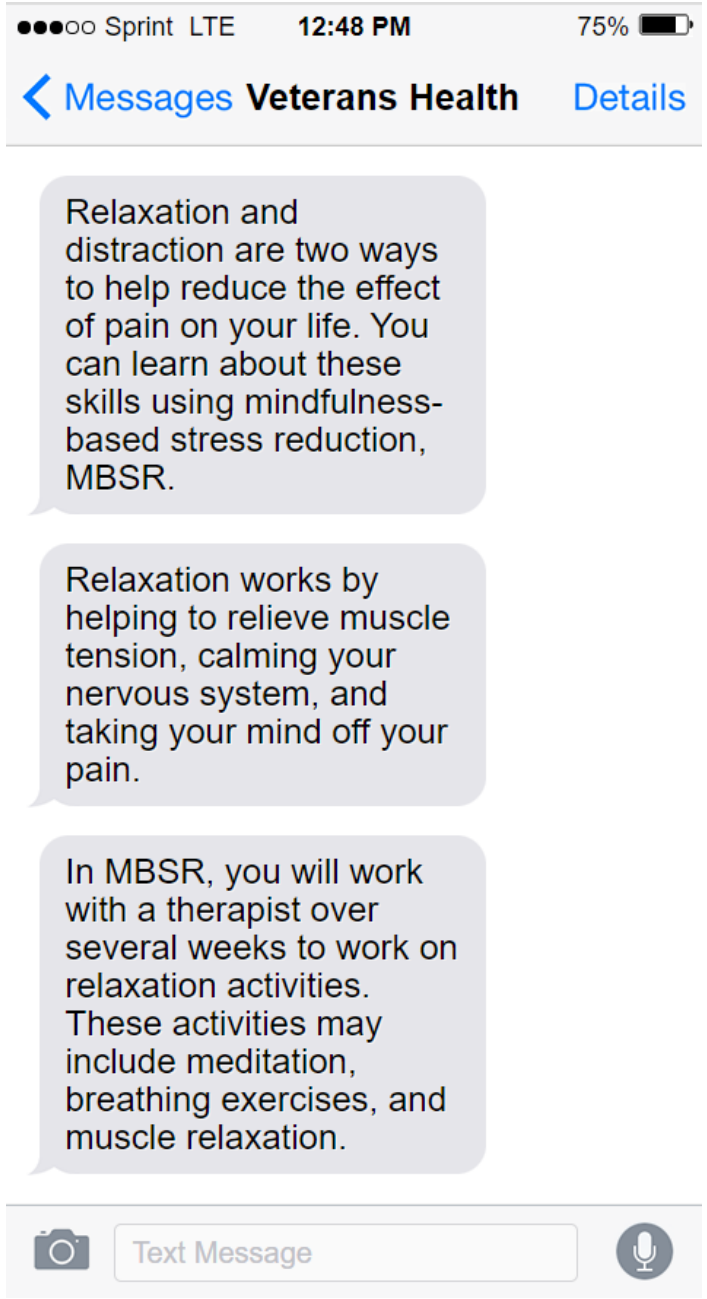
Consider if CBT-CP is right for you by discussing with your family members, peers, and local VA provider.

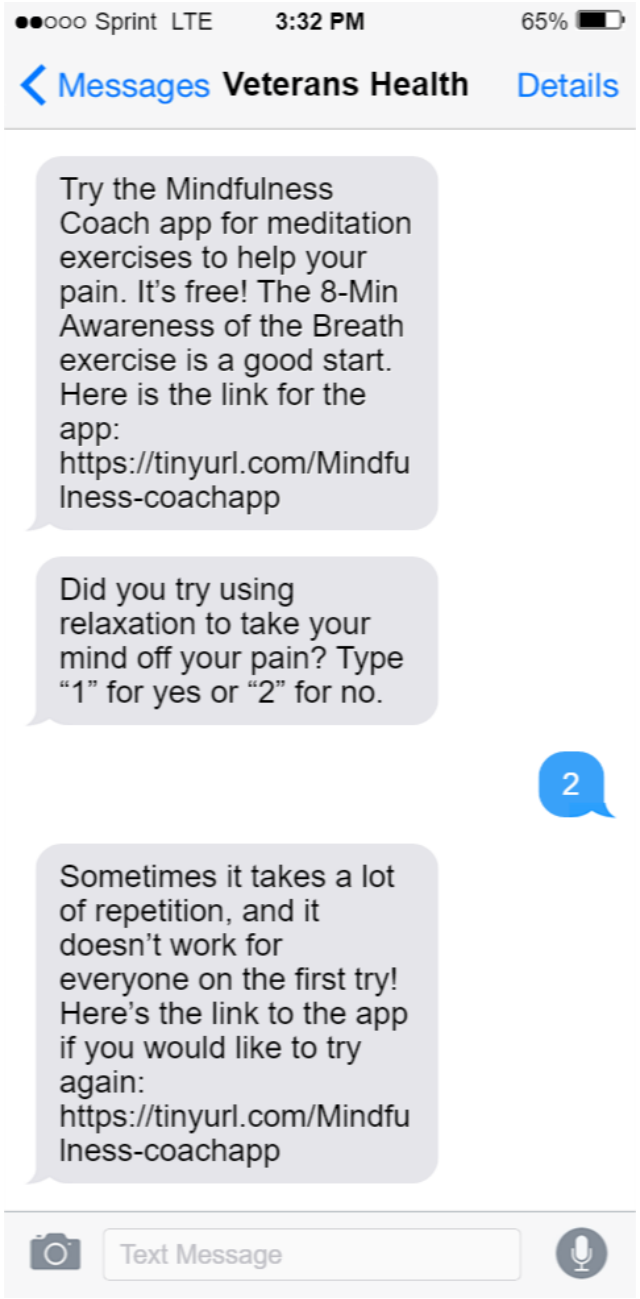
Thanks,

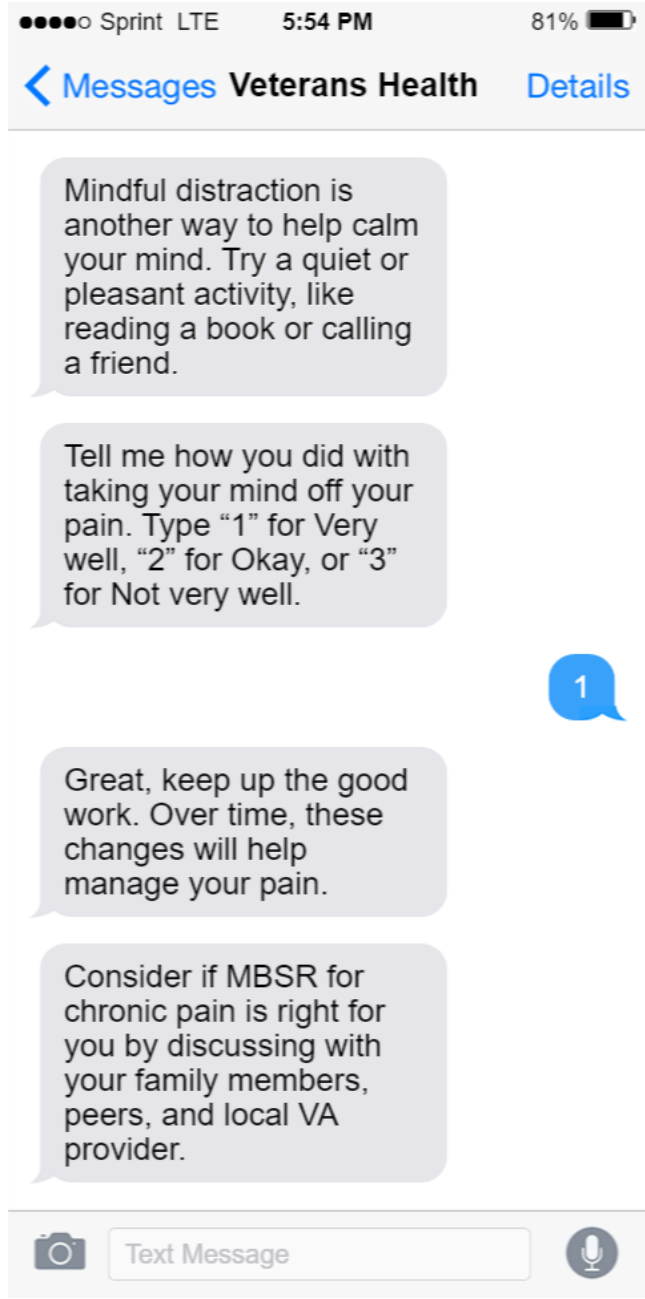
Veterans Health

Check out the short video at this link to learn about one Veteran's experience with CBT-CP: https://tinyurl.com/CBTforCP

Reply


●●●oo Sprint LTE 12:48 PM 75%
Messages Veterans Health Details
Relaxation and distraction are two ways to help reduce the effect of pain on your life. You can learn about these skills using mindfulness-based stress reduction, MBSR.
Relaxation works by helping to relieve muscle tension, calming your nervous system, and taking your mind off your pain.
In MBSR, you will work with a therapist over several weeks to work on relaxation activities. These activities may include meditation, breathing exercises, and muscle relaxation.
Text Message


●●ooo Sprint LTE 3:32 PM 65%
Messages Veterans Health Details
Try the Mindfulness Coach app for meditation exercises to help your pain. It's free! The 8-Min Awareness of the Breath exercise is a good start. Here is the link for the app: https://tinyurl.com/Mindfulness-coachapp
Did you try using relaxation to take your mind off your pain? Type "1" for yes or "2" for no.
2
Sometimes it takes a lot of repetition, and it doesn't work for everyone on the first try! Here's the link to the app if you would like to try again: https://tinyurl.com/Mindfulness-coachapp
Text Message


●●●●o Sprint LTE 5:54 PM 81%
Messages Veterans Health Details
Mindful distraction is another way to help calm your mind. Try a quiet or pleasant activity, like reading a book or calling a friend.
Tell me how you did with taking your mind off your pain. Type "1" for Very well, "2" for Okay, or "3" for Not very well.
1
Great, keep up the good work. Over time, these changes will help manage your pain.
Consider if MBSR for chronic pain is right for you by discussing with your family members, peers, and local VA provider.
Text Message

Summary of VEB Feedback

Message Prototype Development

- Guided by motivation and behavior change techniques from Self-Determination Theory
- Prototypes for email, MyHealtheVet, and text message

Pain/Opioid CORE Veteran Engagement Panel

- Provide contact information to receive additional details about treatment
- Elaborate on what each treatment involves
- Specify which treatments can be done virtually

VA Palo Alto Veteran and Family Advisory Committee

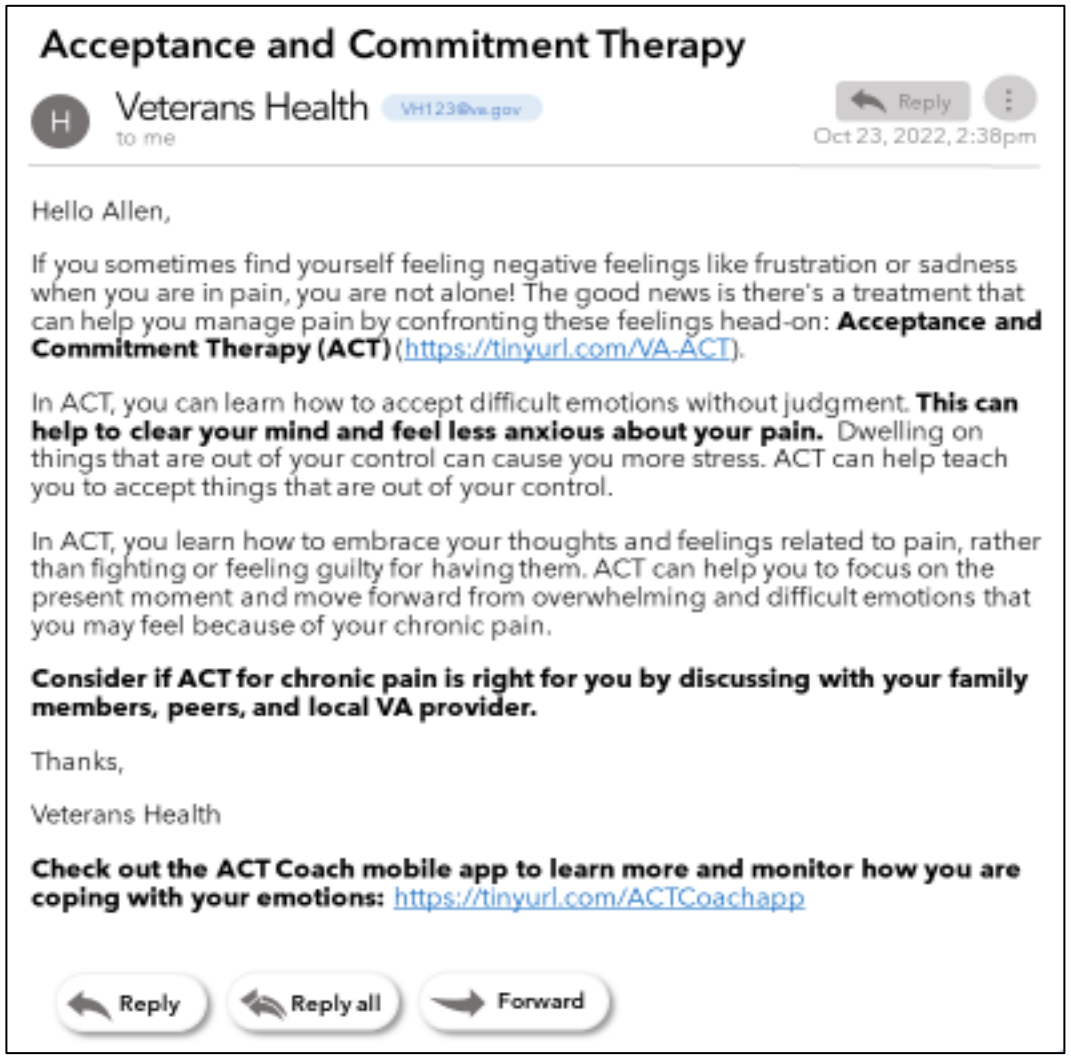
- Avoid acronyms
- Add more response options for text messages beyond yes/no
- Provide different modes of communication for broader reach (email, MyHealtheVet, text message)

Substance Addiction and Recovery Veteran Engagement Board

- Shorten text and add pictures, color, and banners
- Avoid overly positive language (e.g., But there is good news!")
- Use transitions to remind of the previous messages

Example of Refinement

First prototype:



Acceptance and Commitment Therapy

H Veterans Health VH123@va.gov
to me

Reply
Oct 23, 2022, 2:38pm

Hello Allen,

If you sometimes find yourself feeling negative feelings like frustration or sadness when you are in pain, you are not alone! The good news is there's a treatment that can help you manage pain by confronting these feelings head-on: **Acceptance and Commitment Therapy (ACT)** (https://tinyurl.com/VA-ACT).

In ACT, you can learn how to accept difficult emotions without judgment. **This can help to clear your mind and feel less anxious about your pain.** Dwelling on things that are out of your control can cause you more stress. ACT can help teach you to accept things that are out of your control.

In ACT, you learn how to embrace your thoughts and feelings related to pain, rather than fighting or feeling guilty for having them. ACT can help you to focus on the present moment and move forward from overwhelming and difficult emotions that you may feel because of your chronic pain.

Consider if ACT for chronic pain is right for you by discussing with your family members, peers, and local VA provider.

Thanks,

Veterans Health

Check out the ACT Coach mobile app to learn more and monitor how you are coping with your emotions: https://tinyurl.com/ACTCoachapp

Reply Reply all Forward

Example of Refinement

First prototype:

More specific subject line

Avoid overly flowery language

Make purpose of links explicit

Description too vague… not sure what ACT entails

Need more concrete action step and contact number for a real human

More white space, pictures

Example of Refinement

First prototype:

Acceptance and Commitment Therapy

Veterans Health VH123@va.gov
to me
Reply
Oct 23, 2022, 2:38pm

Hello Allen,

If you sometimes find yourself feeling negative feelings like frustration or sadness when you are in pain, you are not alone! The good news is there's a treatment that can help you manage pain by confronting these feelings head-on: **Acceptance and Commitment Therapy (ACT)** (https://tinyurl.com/VA-ACT).

In ACT, you can learn how to accept difficult emotions without judgment. **This can help to clear your mind and feel less anxious about your pain.** Dwelling on things that are out of your control can cause you more stress. ACT can help teach you to accept things that are out of your control.

In ACT, you learn how to embrace your thoughts and feelings related to pain, rather than fighting or feeling guilty for having them. ACT can help you to focus on the present moment and move forward from overwhelming and difficult emotions that you may feel because of your chronic pain.

Consider if ACT for chronic pain is right for you by discussing with your family members, peers, and local VA provider.

Thanks,

Veterans Health

Check out the ACT Coach mobile app to learn more and monitor how you are coping with your emotions: https://tinyurl.com/ACTCoachapp

Reply | Reply all | Forward

More specific subject line

Avoid overly flowery language

Make purpose of links explicit

Description too vague… not sure what ACT entails

Need more concrete action step and contact number for a real human

More white space, pictures

Final prototype:

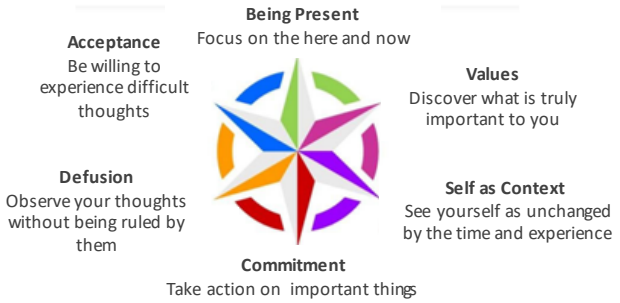
VA Acceptance and Commitment Therapy for Chronic Pain

Veterans Health VH123@va.gov
to me
Reply
Oct 23, 2022, 2:38pm

Hello Allen,

The previous e-mail we sent you focused on Cognitive Behavioral Therapy for Chronic Pain, and today we want to provide you with information on another therapy: **Acceptance and Commitment Therapy (ACT)**. This therapy can help with sadness when you are in pain (To learn more information, click here: https://tinyurl.com/VA-ACT).

ACT is a form of therapy that can teach you how to regain control of your feelings and feel less anxious about your pain. ACT **has six core components**:



If you decide to participate in acceptance and commitment therapy, you will work with a therapist over several sessions and engage in hands-on exercises that may include mindfulness meditation, exploration of values, metaphors, imagery, role play, and homework.

Check out the Acceptance and Commitment Therapy Coach mobile app to learn more and monitor how you are coping with your emotions by clicking on this link: https://tinyurl.com/ACTCoachapp

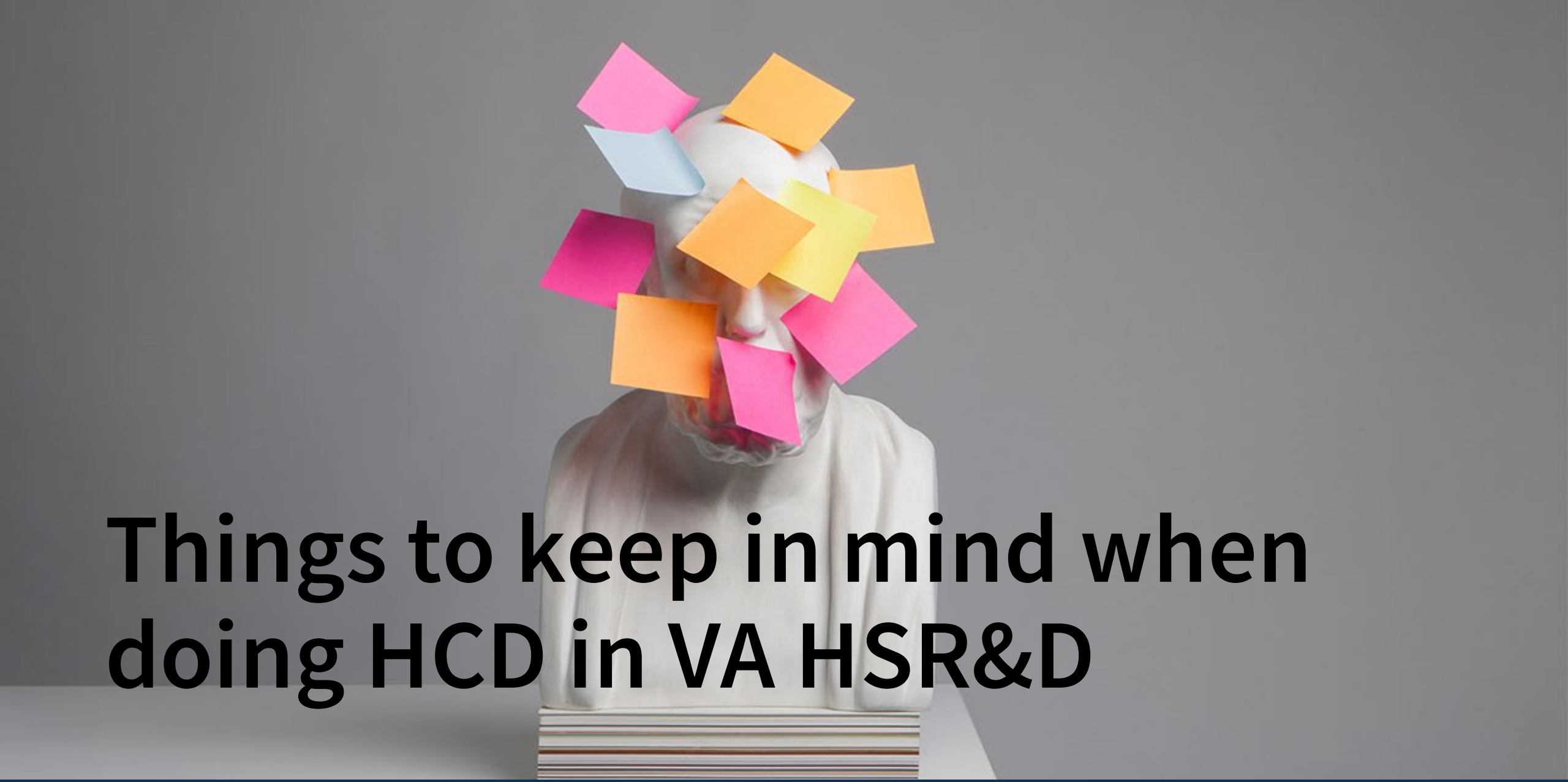
Consider if acceptance and commitment therapy for chronic pain is right for you by discussing with your family members, peers, and local VA provider. **To learn more, give us a call at (555) 555-5555 or click on this link:** https://tinyurl.com/GetStartedACT

Thanks,

Veterans Health

Next Steps

- Conduct interviews with 30 Veterans to learn about preferences (e.g., modality, timing of communication) and perceived impact of messages for psychological approaches to chronic pain
- Construct a summary of findings for primary care clinicians to elicit feedback
- Develop plan for future implementation of messages for Veterans with chronic pain



Things to keep in mind when doing HCD in VA HSR&D

Barriers to HCD in VA HSR&D

- Not an established or recognized methodology in HSR&D research… yet
- Top-down organization
  - End users versus leadership
- Expectations for proposals with a priori solutions
- Limited resources for follow-up evaluation (e.g., maintenance)

Facilitators to HCD in VA HSR&D

- Burgeoning presence of HCD and related approaches in research/QI projects
- Interest and enthusiasm from fellow researchers
- Culture of innovation
- Supportive leadership
- Patience and persistence

“[Human-centered design] does require **embracing uncertainty**, and that can be uncomfortable for people. People need to be **willing to work through a problem without necessarily knowing where they’re going to end up**. For some people that’s really uncomfortable, but I will say **it is worth it** because the **results can be really innovative**.”

-Erin Siminerio, Chief Design Officer

Veterans Experience Office (VEO), VA

We would like to acknowledge the following individuals and entities for their part in this work:

- Jessica Chen, PhD
- Madeleine Golding, MS
- Diana Higgins, PhD
- Marianne Matthias, PhD
- Amanda Midboe, PhD
- Stephanie Shimada, PhD
- Donna Zulman, MD
- The Pain/Opioid CORE Veteran Engagement Panel
- The Substance Addiction and Recovery Veteran Engagement Board
- The VA Palo Alto Veteran and Family Advisory Committee
- University of Washington Department of Human-Centered Design and Engineering
- The UW A LACRITY Center

Interested in a human-centered design core/collaborative at VA?

E-mail one/all of us!

- Sarah: Sarah.Javier@va.gov
- Ashley: Ashley.Griffin1@va.gov
- Katie: Katie.Tirtanadi@va.gov
- Meg: Megan.Moldestad@va.gov

Questions?

Resources

Within VA Resources

- Veteran Experience Office article on HCD/improving Veterans' experience
- VA Lean (six sigma) trainings - local
- VA Design Office - creating Veteran-centered experiences
- Office of Healthcare Innovation and Learning (OHIL)
- VHA Innovators Network (iNET)
- The Lab@OPM
  - HCD Design Operations Guide
  - Discover Phase Field Guide
- Creating a Veteran Engagement Board
- VHA Directive 1026.01 – VHA Systems Redesign & Improvement Program

Outside VA Resources

- IDEO Design Kit
- LUMA Workplace
- Top 4 Principles of HCD
- Consortium for Public Education HCD Resources
- Institute for Healthcare Improvement – Open School Improving Health and Health Care Worldwide | IHI - Institute for Healthcare Improvement
- Design Thinking Bootcamp - Stanford Design Thinking Bootcamp — Stanford d.school

A few papers on HSR/HCD

- Flood M, Ennis M, Ludlow A, Sweeney FF, Holton A, Morgan S, Clarke C, Carroll P, Mellon L, Boland F, Mohamed S. **Research methods from human-centered design: Potential applications in pharmacy and health services research.** Research in Social and Administrative Pharmacy. 2021 Dec 1;17(12):2036-43.
- Fischer M, Safaeinili N, Haverfield MC, Brown-Johnson CG, Zionts D, Zulman DM. **Approach to human-centered, evidence-driven adaptive design (AHEAD) for health care interventions: a proposed framework.** Journal of General Internal Medicine. 2021 Apr;36:1041-8.