



Dimagi and CommCare for Mental Health

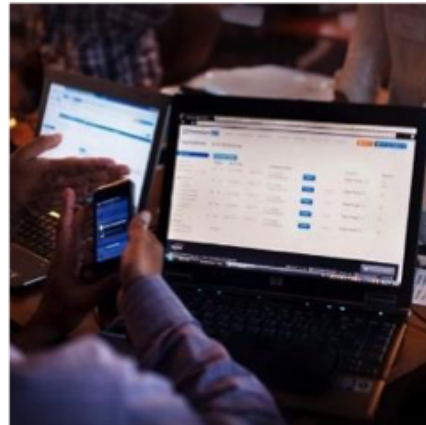
Kaley Lambden, Senior Field Manager

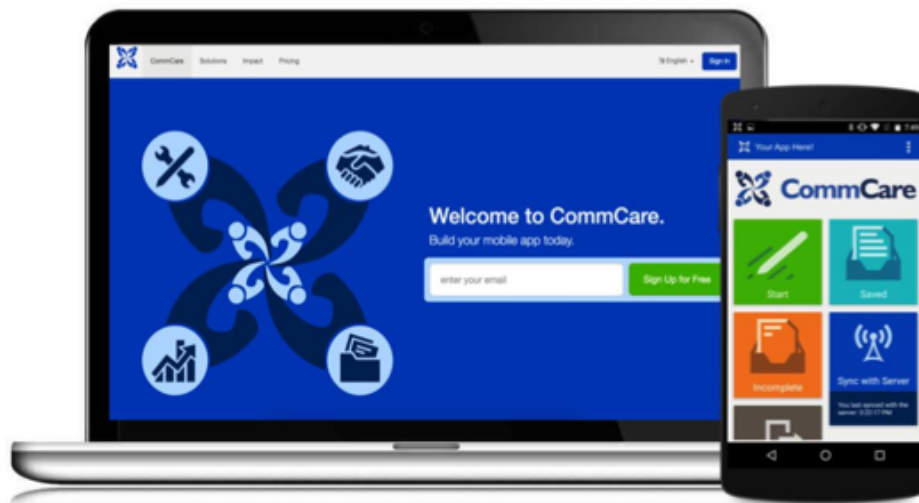
Dimagi, Inc.

Jan 31th, 2018



- Socially conscious software company created in 2002 out of Harvard and MIT
- Experience implementing hundreds of projects in 60+ countries
- Team of 120+ engineers, scientists, public health experts, physicians and field consultants
 - Offices in the United States (HQ), Senegal, India, & South Africa
- Makers of CommCare (www.commcarehq.org), a leading open source mobile platform for the last mile

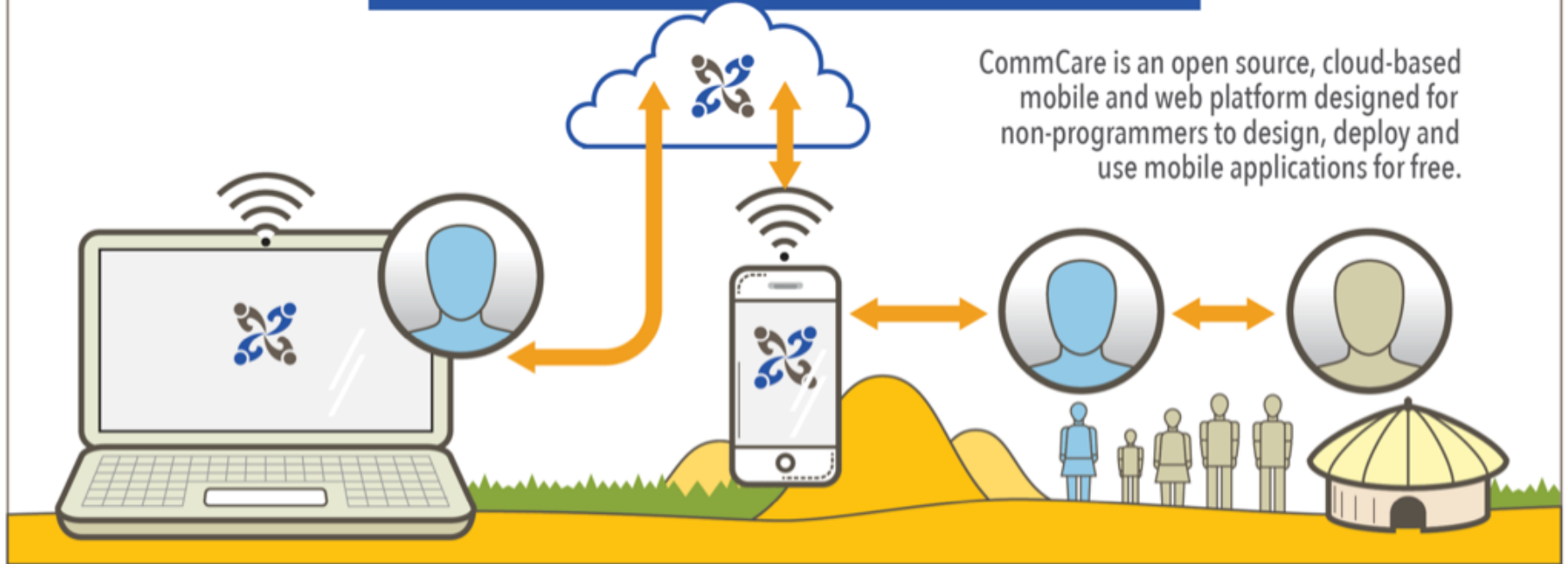




- A leading, open source platform that enables anyone to design and launch mobile apps.
- Most widely used, evidence-based mobile platform used by frontline workers (FLWs)

HOW DOES COMM CARE WORK

CommCare is an open source, cloud-based mobile and web platform designed for non-programmers to design, deploy and use mobile applications for free.



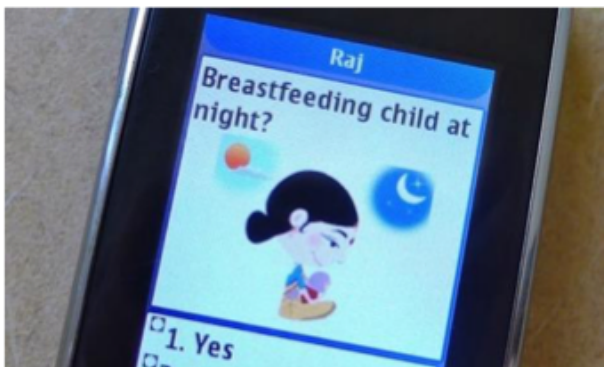


*Used across **numerous sectors**,
from health to agriculture to WASH.*





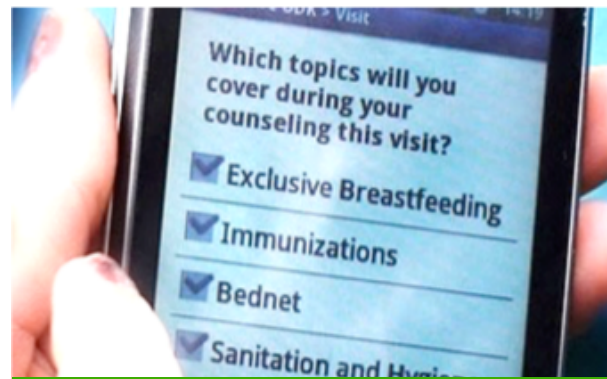
*Designed for **multiple use cases**,
& across multiple types of users.*



Data Collection



Client Counselling



Checklists & Protocols



SMS & Training Reinforcement



Real-time data



Monitoring & Evaluation



CommCare

*Active in **60+ countries**,
across hundreds of projects.*



CASE STUDY: UW-SPIRIT APPLICATION

Project Context

Impact area: Mental health disorders are a major contributor to the global burden of disease. WHO estimates that over 300 million people around the world suffer from depression and it is the leading cause of disability worldwide.

Location: (USA) Dimagi worked with the University of Washington to launch an application in rural communities throughout 3 states where access to mental health care providers is extraordinarily low: Washington, Arkansas, & Michigan

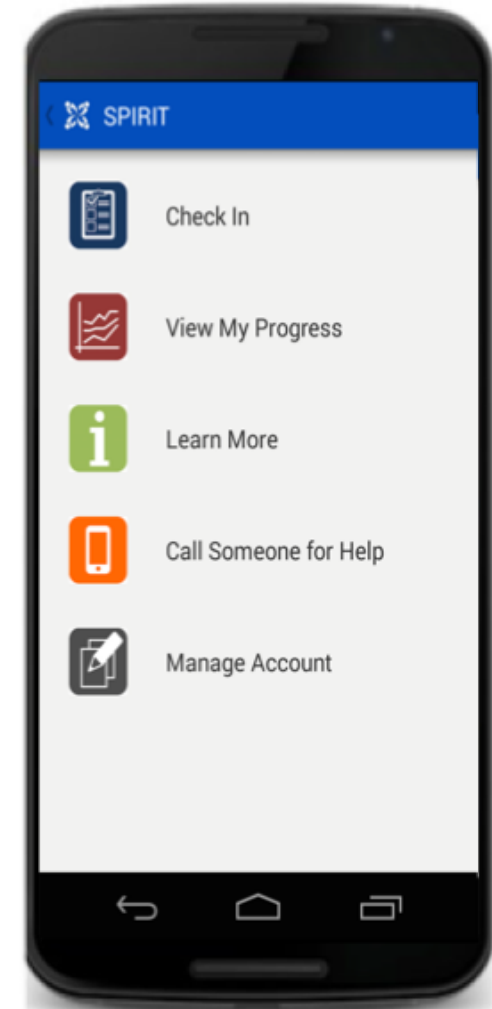
America's health care safety net: 9,000 Community Health Centers (CHCs) providing services to **21 million Americans**

- Almost half (49%) of CHC patients live in rural areas
- 93% live at or below the Federal Poverty Level
- 547% increase in CHC patients with a MH diagnosis between 2001 and 2012
- Over 1 million patients diagnosed with a MH disorder in 2013 alone
- In 2012, there was 1 psychiatrist per 49,764 CHC patients and 1 psychologist per 43,505 CHC patients

CommCare: Patient app integrated with community clinics' EMR system for both patient self-management and coordination directly with their care team.

What does the App do?

- **Self-monitor symptoms** for depression, bipolar, and/or PTSD
- **Communicate with their mental health care providers** on their care plans, medication adherence, and symptoms
 - providers can view patients' weekly symptom score in their patient registry EMR system to prioritize who needs a check in or additional support
- **Manage a support plan and safety contacts** (with the ability to call out to registered support contacts, including family, friends, and supportive services)
- **Learn more** about different mental health conditions, treatment options, medications and side effects
- Set up and manage **personal SMS reminders** for symptom check ins, medications, visits etc...



APP DEMO

App Demo



Once the CommCare SPIRIT app is on the patient's phone she can log in with her unique username and password

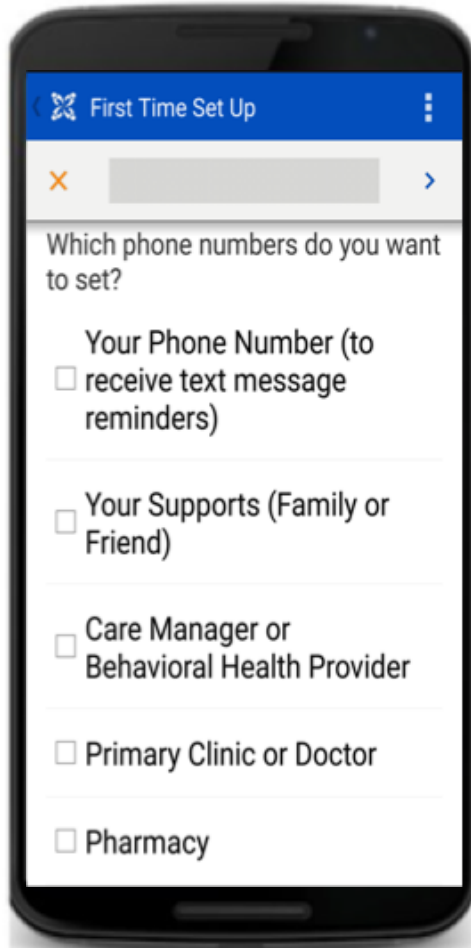
She then clicks "Enter" to enter the app

App Demo



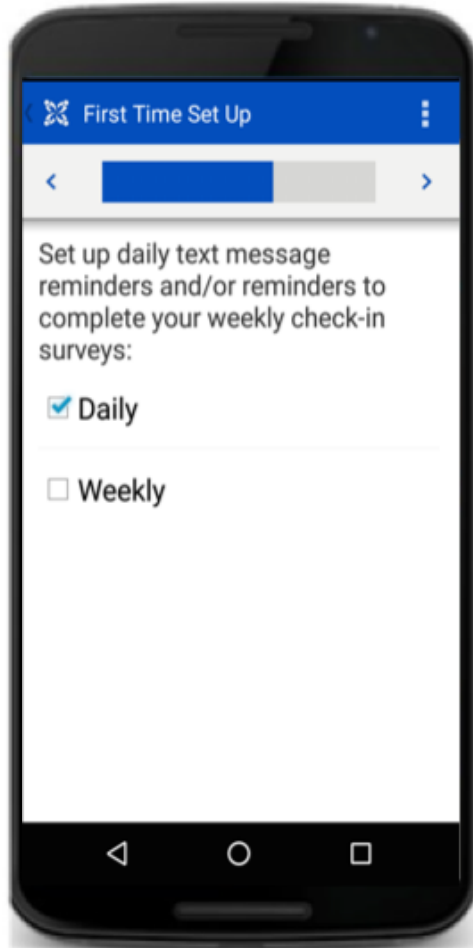
She chooses **First Time Set Up** to personalize her app.

App Demo



She **sets up** her support contacts.

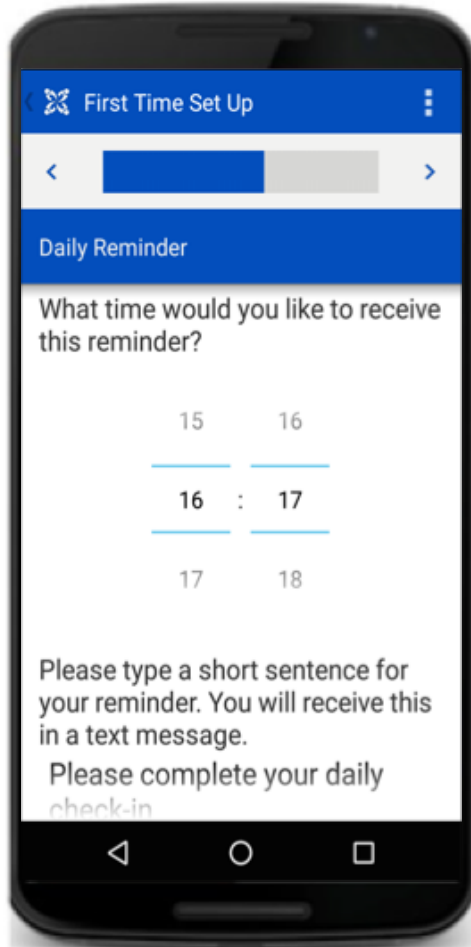
App Demo



She **sets up**:

- Daily text message reminders to take her medication
- Weekly text message reminders to complete her check ins

App Demo



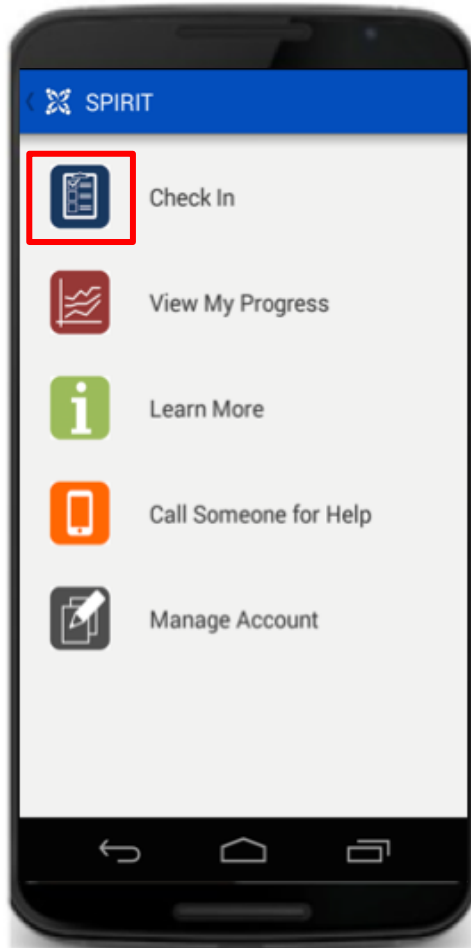
She **sets up**:

- The time of day she would like to receive the message
- The message text:

Example: "Please complete your daily check-in"

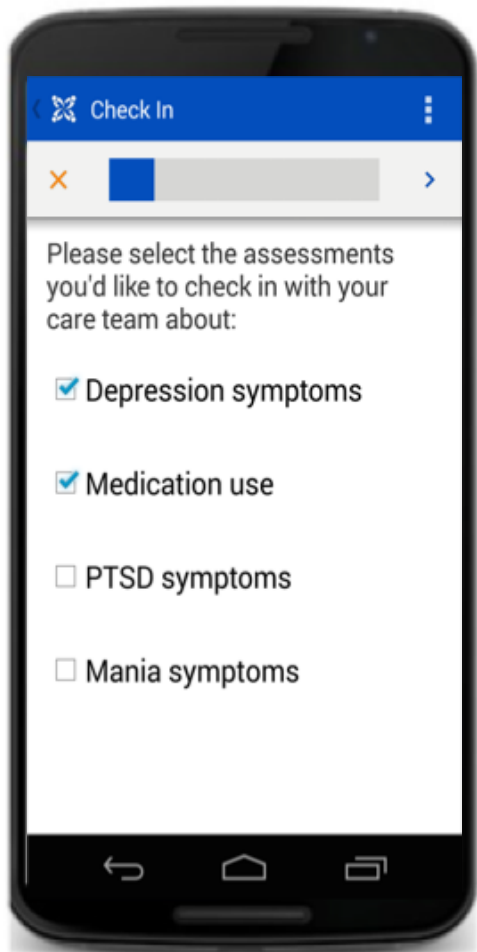
"Remember to take your medication"

App Demo - Check in



Once a week, the patient logs into her app to check-in with her care manager.

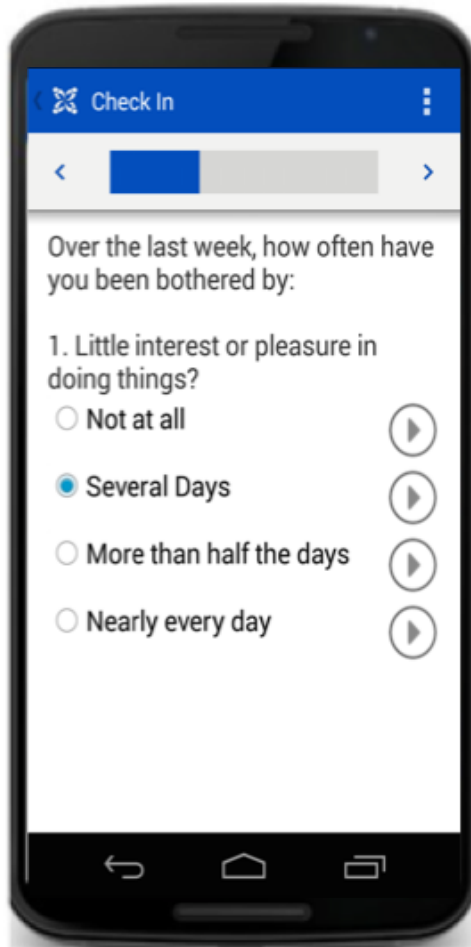
App Demo - Check in



She selects what she would like to check-in on, **based on her care plan:**

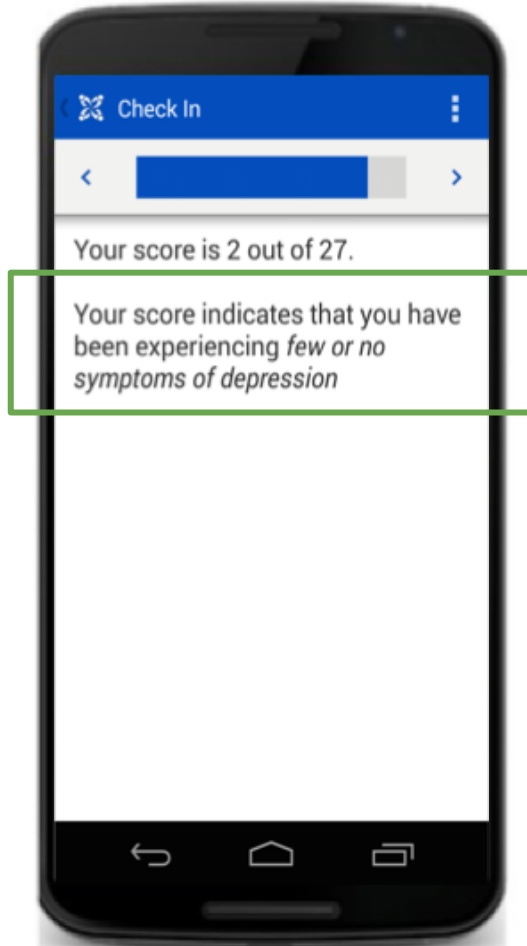
- Depression symptoms
- Medication adherence
- PTSD symptoms
- Mania symptoms

App Demo - Check in



She answers a series of questions based on how she's felt **over the past week.**

App Demo - Check in

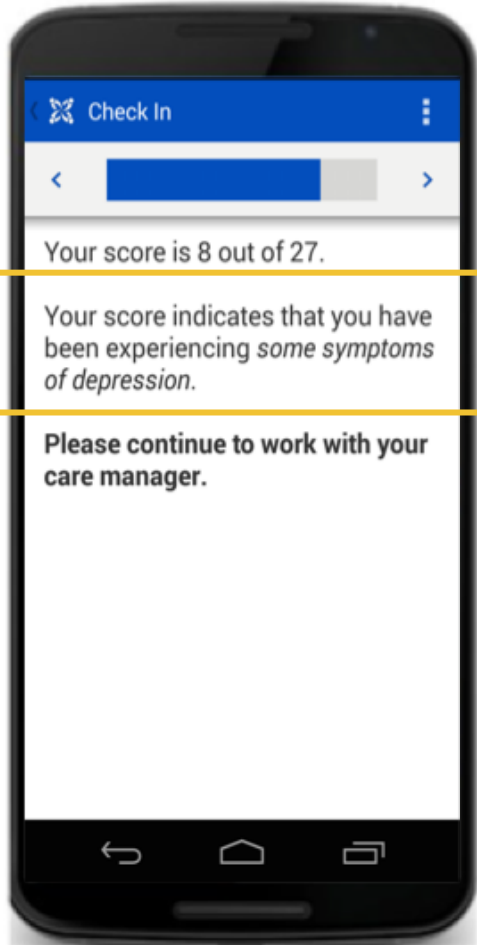


At the end of each assessment, she sees her score.

She's also provided with **feedback**, based on the results.

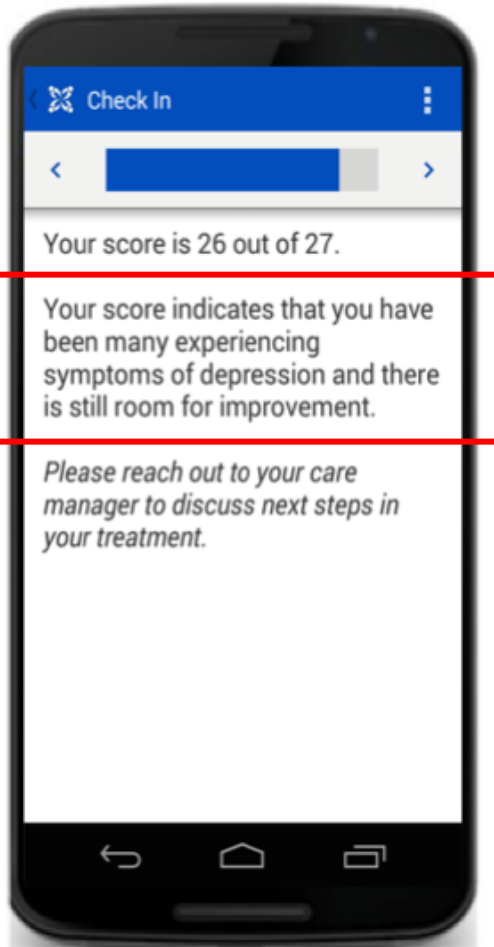
(This is the message if her score is **GREEN.**)

App Demo - Check in



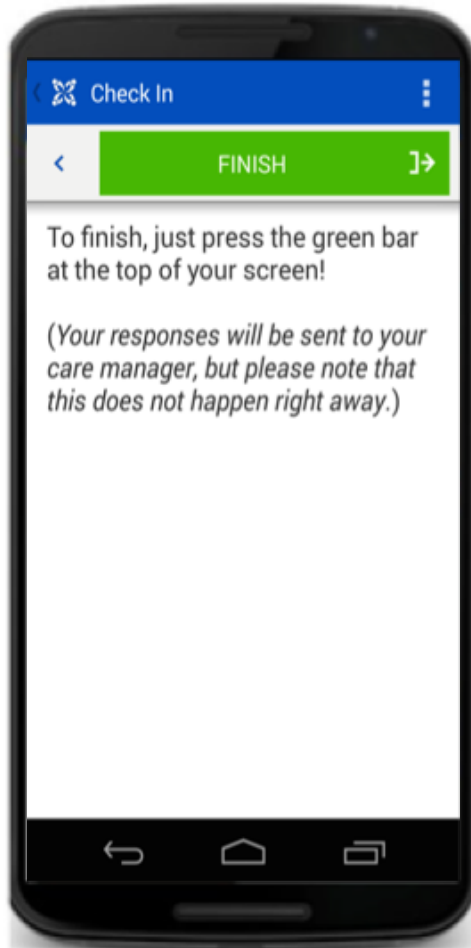
She will see this message if her score is **YELLOW**.

App Demo - Check in



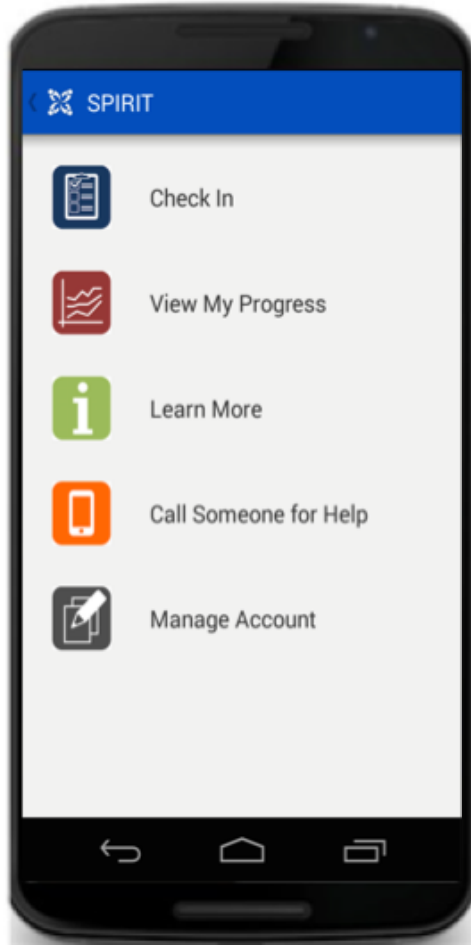
She will see this message if her score is **RED**.

App Demo - Check in



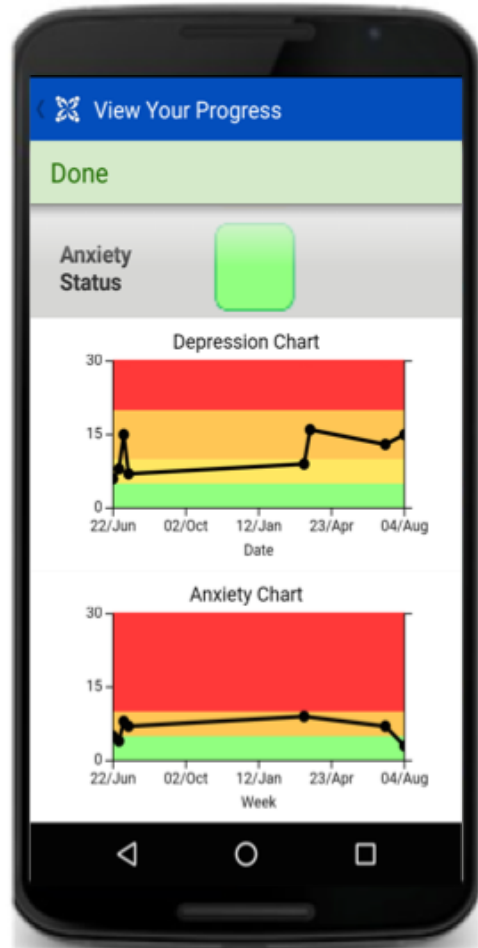
Then, the patient can **submit her scores** to the care manager over her phone.

App Demo - View Progress



At anytime, she can log in to the SPIRIT app, and **view her progress.**

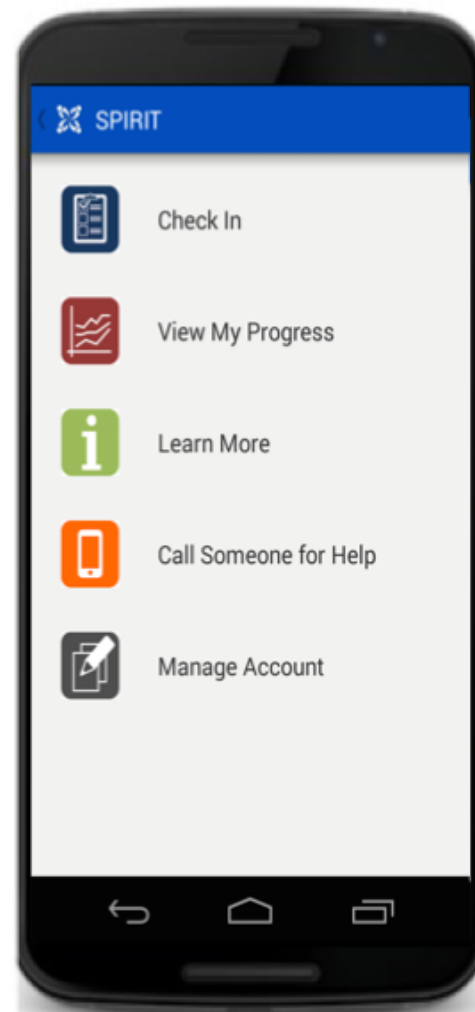
App Demo - View Progress



Her weekly scores are shown on a graph.

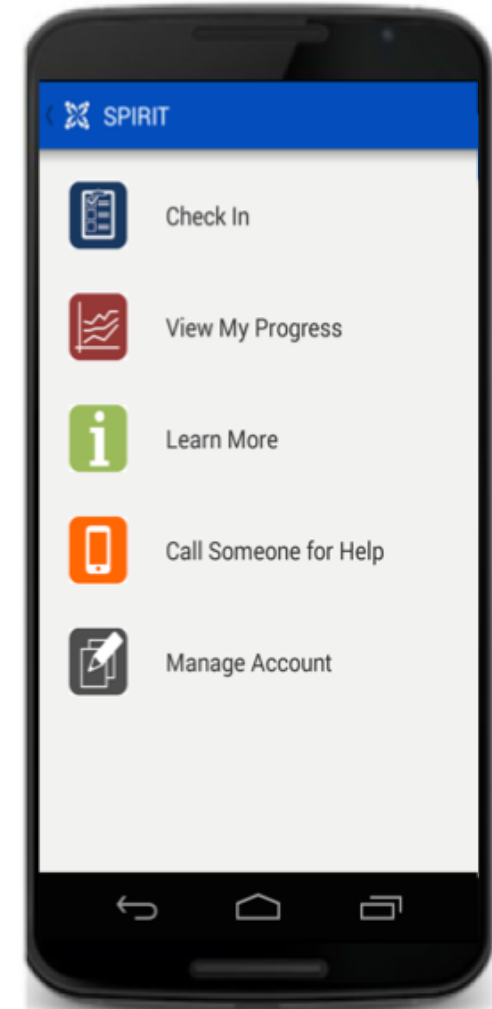
Impact to Providers (Hypothesis)

- Patient data on medication adherence and symptoms scales can inform Care Manager **coaching to improve medication adherence**
- **Help identify which patients' medications aren't working** based on their symptom scales over time; can pivot treatment model, and refine and individualize interventions and care plan
- Care providers can **see alerts** if any patient responded > 0 to suicide ideation scale (0-3) and direct immediate care
- Care providers can **identify manic or depressive symptoms / trends** with better real time data to refine diagnosis on whether a patient has depression or BD



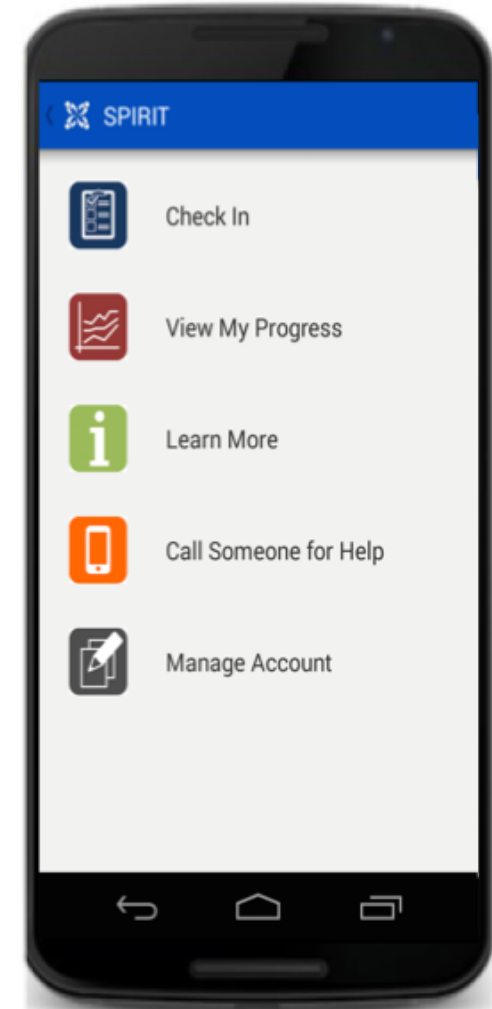
Impact to Patients (Hypothesis)

- **Improved understanding** of side effects / mitigation strategies via the Learn More section
- **Improved access to support**
- **Improved awareness and mitigation strategies** for symptom triggers & coping strategies
- **Improved med adherence** via SMS reminders (can also set up any weekly / daily sms reminder patients want to support other behavioral activation therapy)



UW Impact Metrics

1. **Health related quality of life** – The primary outcome measure (measured with the Short Form 12 Mental Health Composite summary scores)
2. **Patient self-reported symptoms** with disorder-specific assessments (standard is PTSD= PCL, depression= PHQ-9, Bipolar = Mania)
3. **Side Effects** – the number and severity of patient-reported medication side effects
4. **Recovery outcomes:** Measured using the Recovery Assessment Scale covering five domains: confidence and hope, willingness to ask for help, goal and success orientation, reliance on others, and no domination by symptoms.



Thank you!
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*For more information on Dimagi, please visit www.dimagi.com
For more information on CommCare, please visit www.commcarehq.org
Questions? Email info@dimagi.com*

