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Problem Space

What's wrong with existing depression care?

- Only 50% of patients referred to a mental health professional follow through with the referral.
- Many do not have more than one visit.
- 50-70% of patients do not have a full response to the first treatment plan, need changes in treatment.

Proper depression care requires persistence, but the onus is placed on depressed patients to follow up and maintain care.

Problem Space

Integrated Care Model: Collaborative Care



Problem Space

Limitations of Integrated Care

- Patients with issues may not seek help from doctor.
- Patients may forget or disregard doctor's instructions.
- Outreach can become inefficient.

Although the goal is to follow-up with patients every 2 weeks, often there are missed appointments leading to longer lags between contacts.

Project Description

Solution: myStatus mobile app

- Remind patients of medications and instructions
- Get daily patient status information
- Show progress over time
- Troubleshoot when problems arise
- Send status and other important data to care providers
- Customize to patient's conditions and goals

Provide patients with better tools to manage their conditions between visits with their providers.

Goals / Vision

- Proactive collaborative care between patients and PCP
- User engagement via prompted behavioral Intervention with minimized imposition
- Encouragement system via personalized, dynamic feedback and progress report
- Facilitated communication with care teams
- Personalized patient education and reminders
- Privacy and HIPAA Compliance

Related Work

There are several apps that provide reminders, track progress over time, and/or do rudimentary troubleshooting.

- They don't improve the connection between patient and care team.
- They don't provide collected info to physicians.
- They cannot be customized by physicians or patients to collect different information or provide more in-depth troubleshooting.

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Findings So Far

What we did:

- Discussed usability, privacy, features, and design at length with Dr. Amy Bauer, psychiatrist at UWMC
- Created IA diagram, data architecture, and low-fi prototype

What we need to do:

- Conduct usability studies and iterate
- Design tool for physicians to create surveys
- Implement the patient-side Android app and web-based registry for PCP

Basic Scenario

- User has just been diagnosed with depression.
- Primary care provider prescribes an antidepressant, schedules an appointment for a month from now.
- User receives notification the next day from the mobile app prompting them to answer a few questions.

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Good morning Mr. Brown. Dr. Physician asked me to check how you're doing.

Did you start taking the citalopram that was prescribed?

Yes							
No							
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Skip Question							
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OK. Can you tell me what the reason is that you didn't start it?

I plan to take it later today

I forgot to take it

Didn't pick up prescription

I don't want to take it now

Other

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Skip Question

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Your medication will work best if you take it every day and make a habit of it.

Can you take your medication now?

Yes, I'll take it now

No, it's not nearby

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Skip Question

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Try to think of a way to remind yourself to take it when you do have it, like by writing yourself a note or setting a reminder.

Your medication will work best if you make a habit of taking it every day. Some people find it can be helpful to keep their medication near something they use every day, like next to their toothbrush, alarm clock, or fridge, so they don't forget.

Next Question

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Architecture

- User interacts with HTML5 Android app leveraging ODK Survey tools to collect data
- Collected information syncs to existing patient information database
- Physician can view progress using a web interface
- Physicians can develop new surveys via a new web interface and deploy them to patients

Information Architecture



Data Architecture



Future Plans



Questions?