Lessons from an Empowered Patient and Her Caregiver

Session 228, February 23, 2017

MITRE

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GEORGE MASON UNIVERSITY

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Speaker Introduction

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Conflict of Interest

Kristina Sheridan, MS
Has no real or apparent conflicts of interest to report

Kate Sheridan
Has no real or apparent conflicts of interest to report

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Learning Objectives

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

- Describe patient-facing tools and strategies that support bi-directional communication between patients, providers and other healthcare professionals and discuss how these strategies result in improved health outcomes
- Demonstrate tools and best practices for enabling patient self-management outside the clinical setting and discuss how to integrate the patient-generated data from these tools into the clinical setting
- Show how real world experiences in engaging patients and their caregivers with their health and healthcare activities improve outcomes
- Demonstrate application of IT best practices and methodologies to enable patients to optimize their daily activities

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An Introduction of How Benefits Were Realized for the Value of Health IT

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

Satisfaction: Patient engagement improves communication between patients and providers

Treatment/Clinical: Empowering patients to gather symptom data between appointments and clearly communicate the information to their care team supports clinical decision-making and treatment evaluation

Electronic Data: Increased availability of patient-generated data increases data sharing and reporting

Patient Engagement: Longitudinal patient-generated health data supports analysis, improves patient engagement and increases patient self-awareness

Savings: Increased patient engagement has been demonstrated to reduce costs

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A Patient's Story

Kate Sheridan
Student, Health Administration and Policy

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The Beginning

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Healthy to Sick

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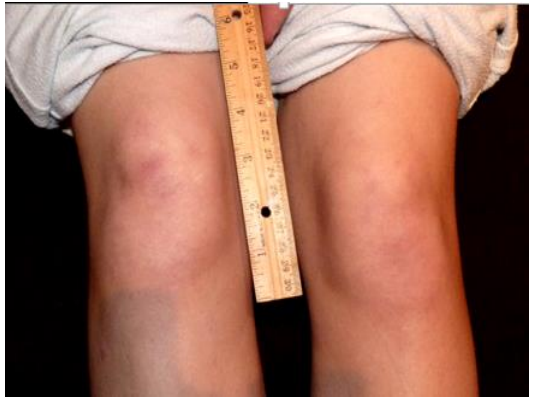
Soccer to Wheelchair

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION



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High Pain Levels

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Communicating with Doctors

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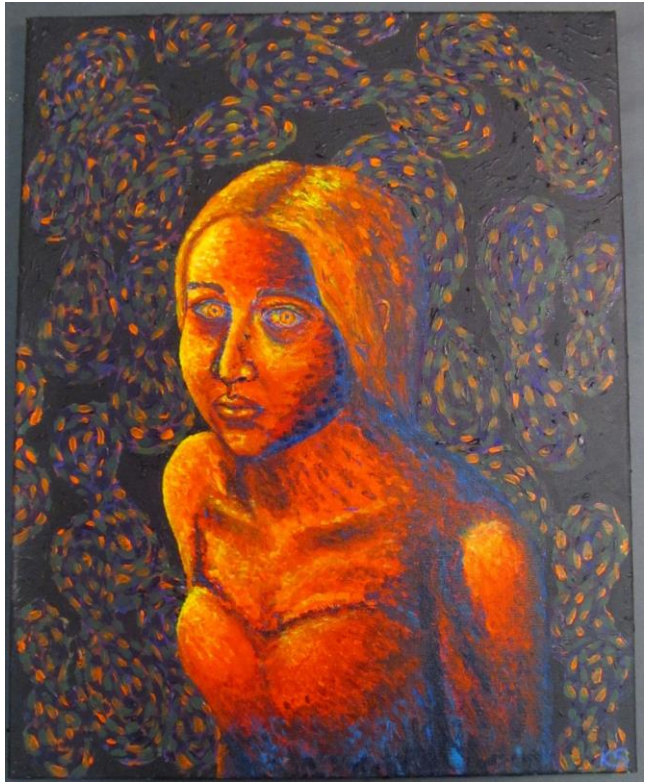
Communicating Socially



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Maintaining Normal

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Building Relationships

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Emergency Shoes

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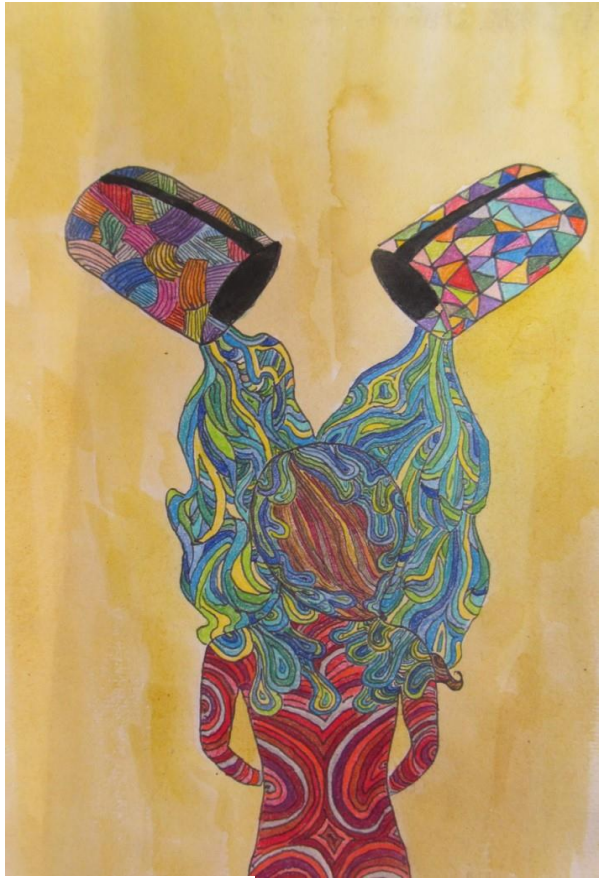
Self-Management



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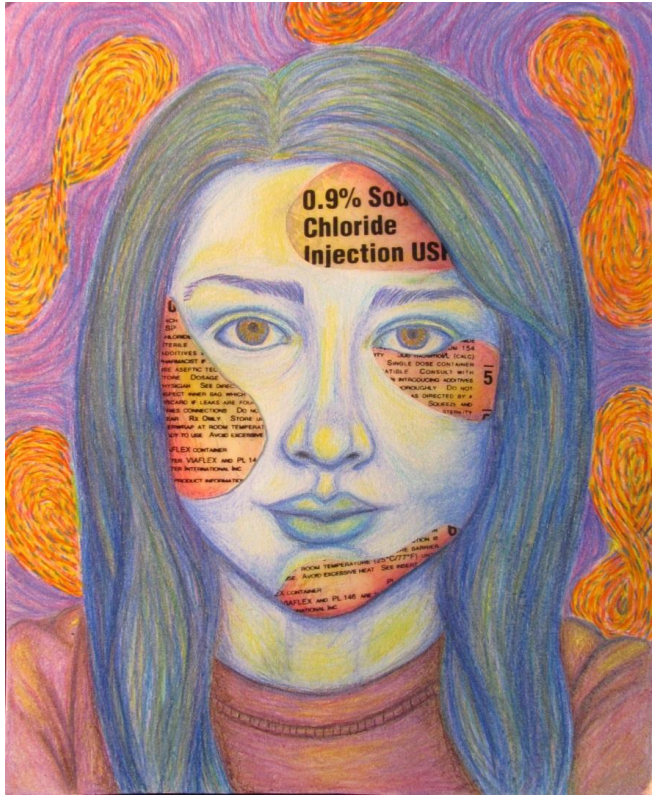
Balance



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Empowered

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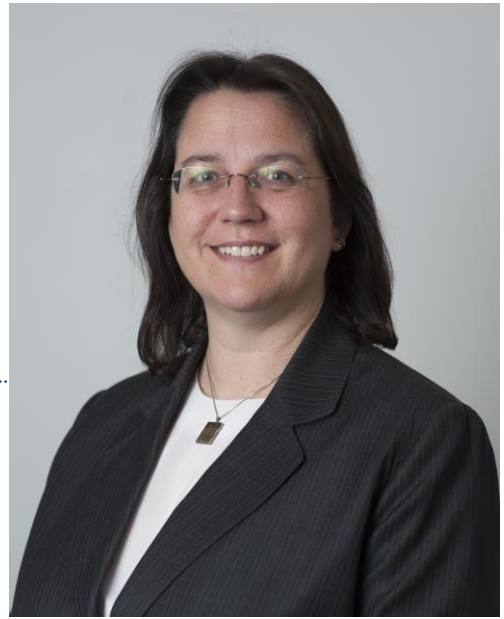
A Caregiver's Story

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

Kristina Sheridan, MS
Department Head/Principal Investigator

MITRE



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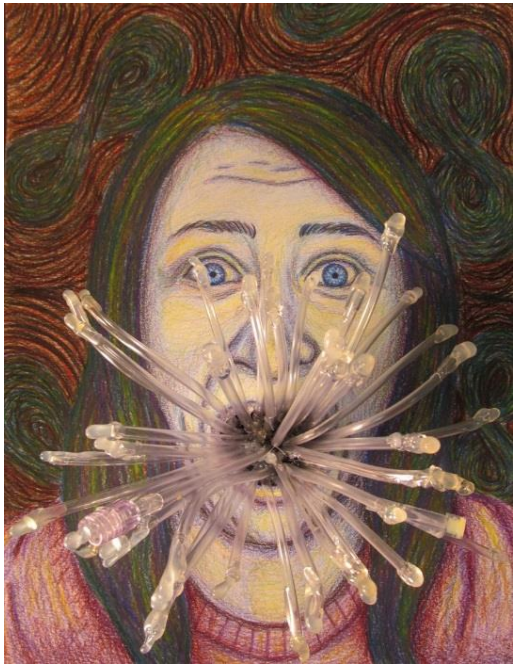
Overwhelmed



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Patient's Data

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Patient's Information

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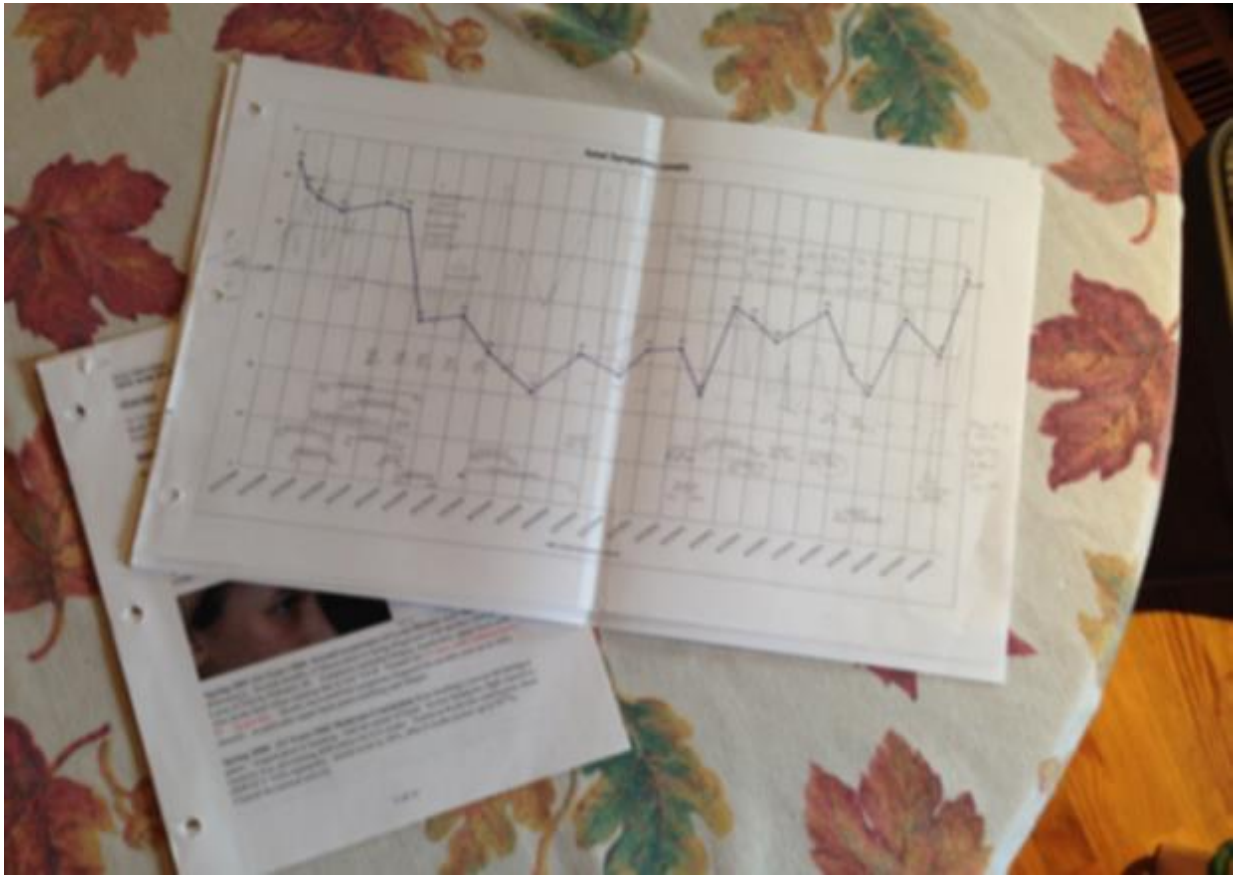
Patient's Story



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Patient and Caregiver Experts

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

"People are experts in everyday living. Physicians are experts in clinical care. Technologies bring them together."

– Patricia Brennan, RN, PhD, FAAN, FACMI

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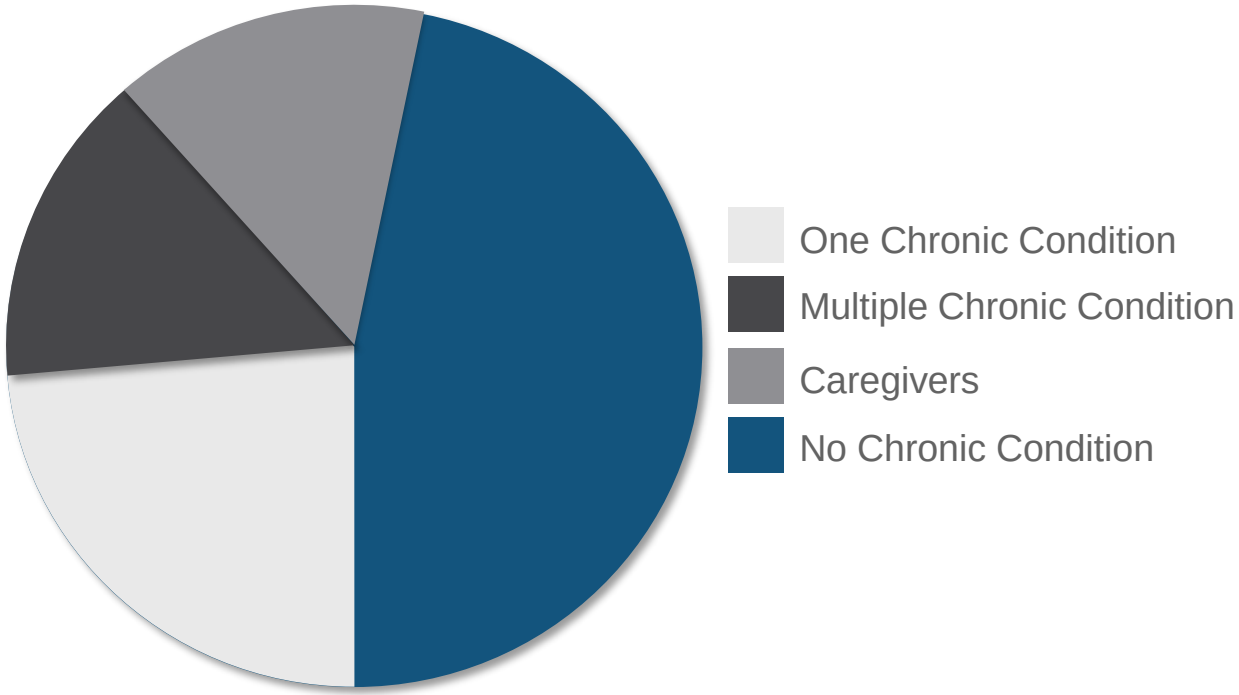
National Challenge



Almost **1/3 people** in the US manage at least one chronic condition[1]

More than **3/4 of US healthcare dollars** are spent on their behalf

[1]Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. *Prev Chronic Dis.* 2014;11:130389. DOI: http://dx.doi.org/10.5888/pcd11.130389.

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Benefits of Patient Engagement

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Cultural Shift

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

Current

Clinical Experts and Clinical & Passive Patient-Generated Health Data

+

Future

Engaged Patient Expert and Active Patient-Generated Health Data

=

BEST CARE

Patient- Provider Partnership

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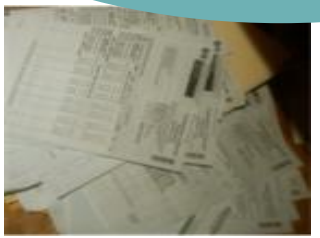
Why is it so hard?

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

~~Engaged~~
~~Pro-Active~~
~~Shared Decision-Makers~~
~~Partners~~
~~Empowered~~



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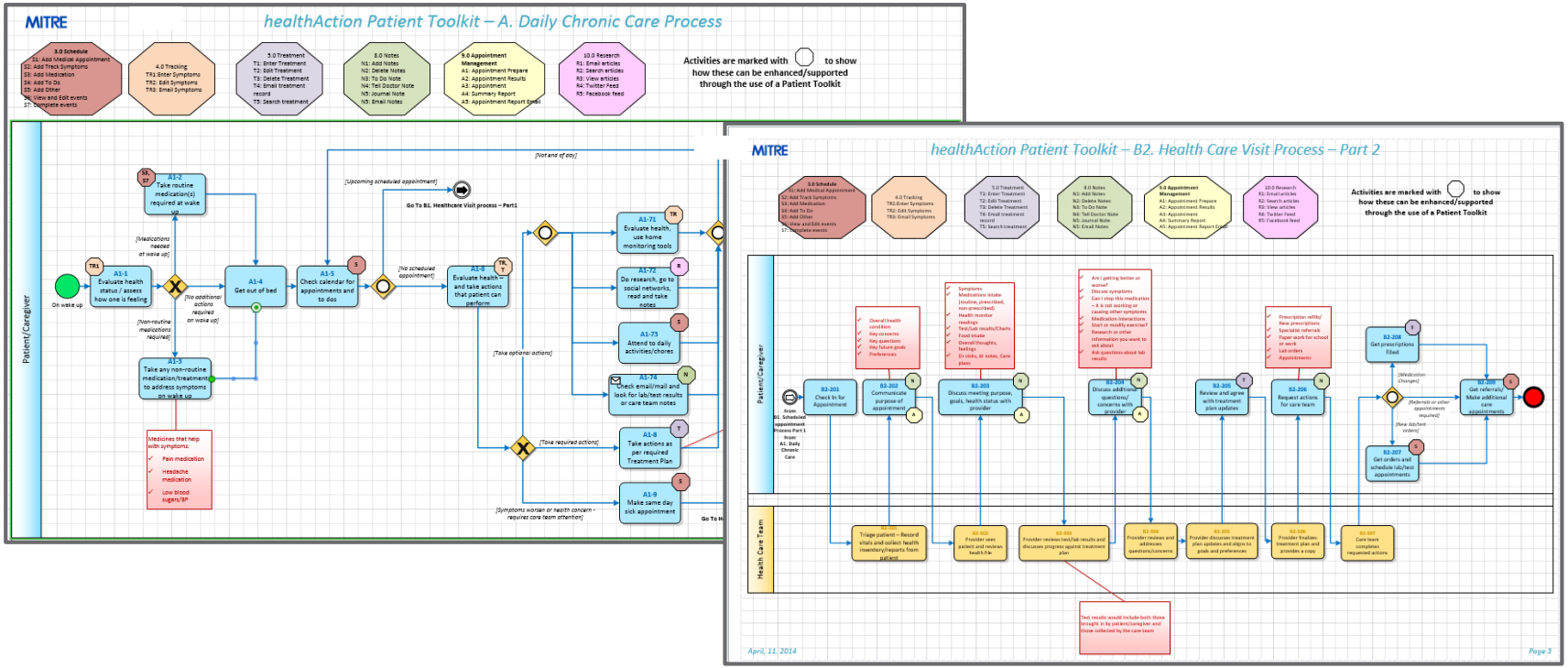
Patient Workflow



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Track – Manage - Share

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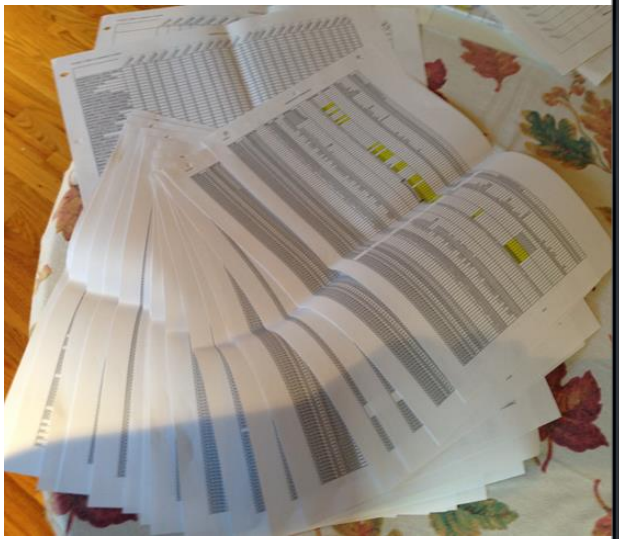
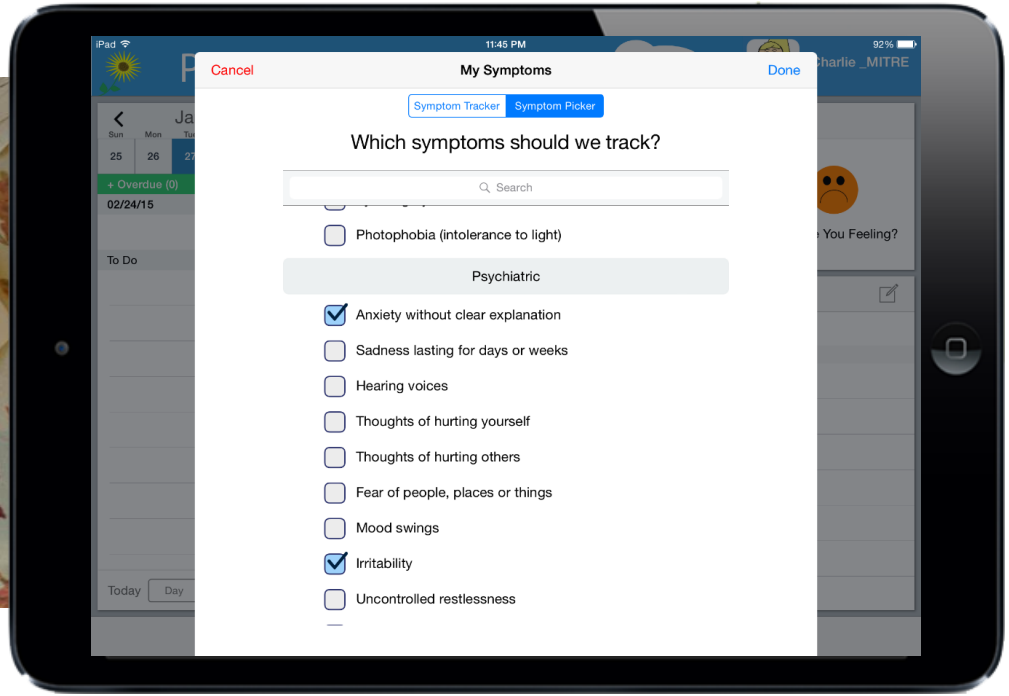
Track – Symptom Picker





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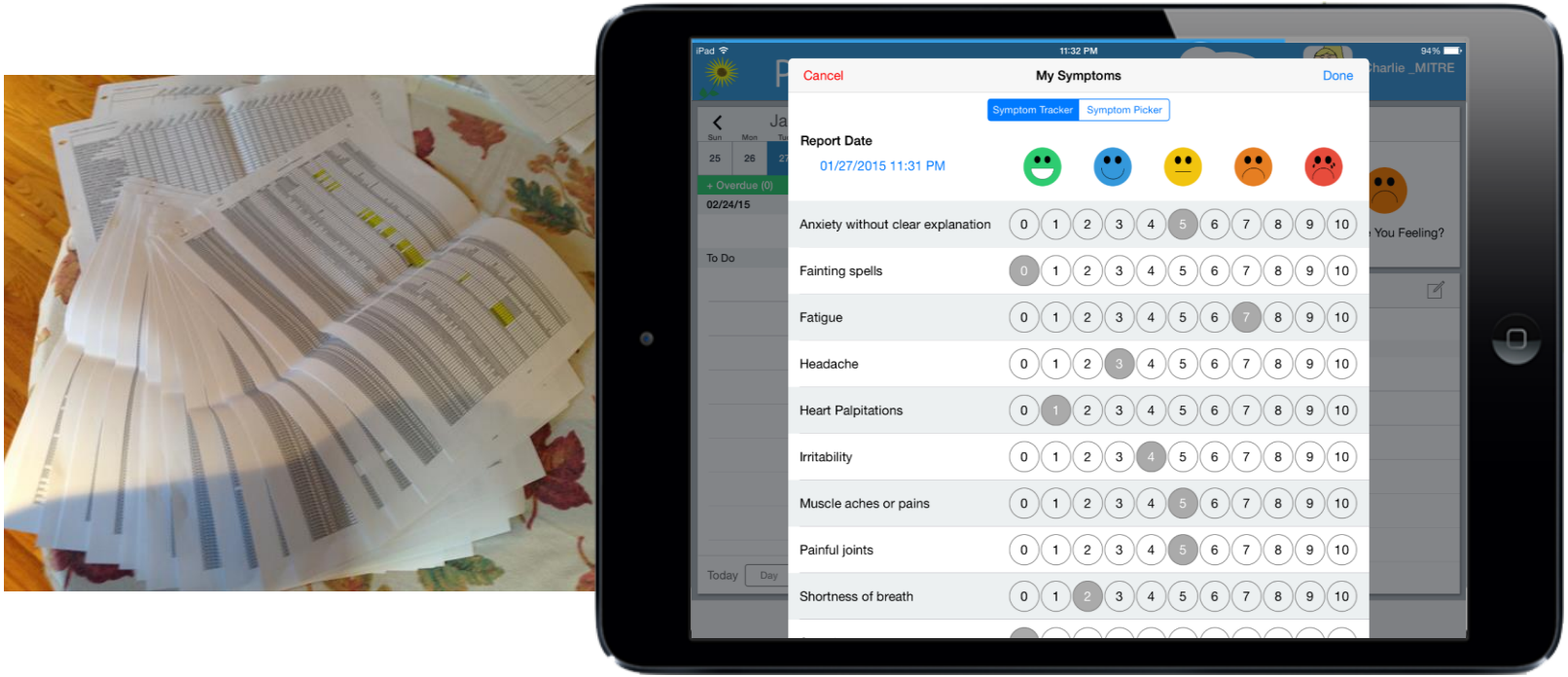
Track – Symptom Tracker

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION



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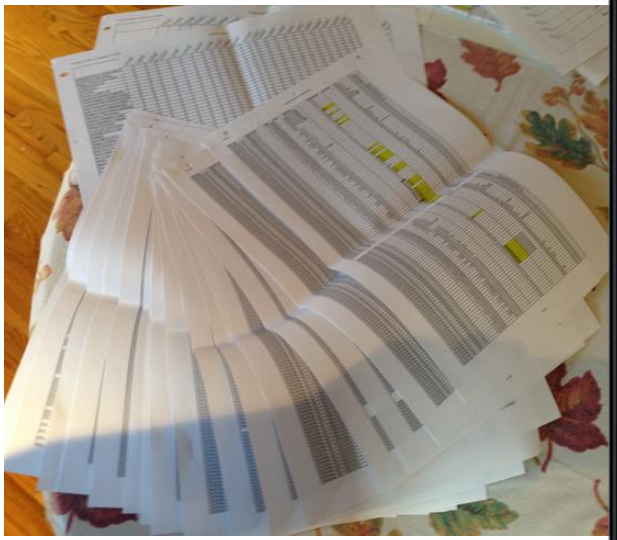
Track - Medications



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Track – Medication Reminders

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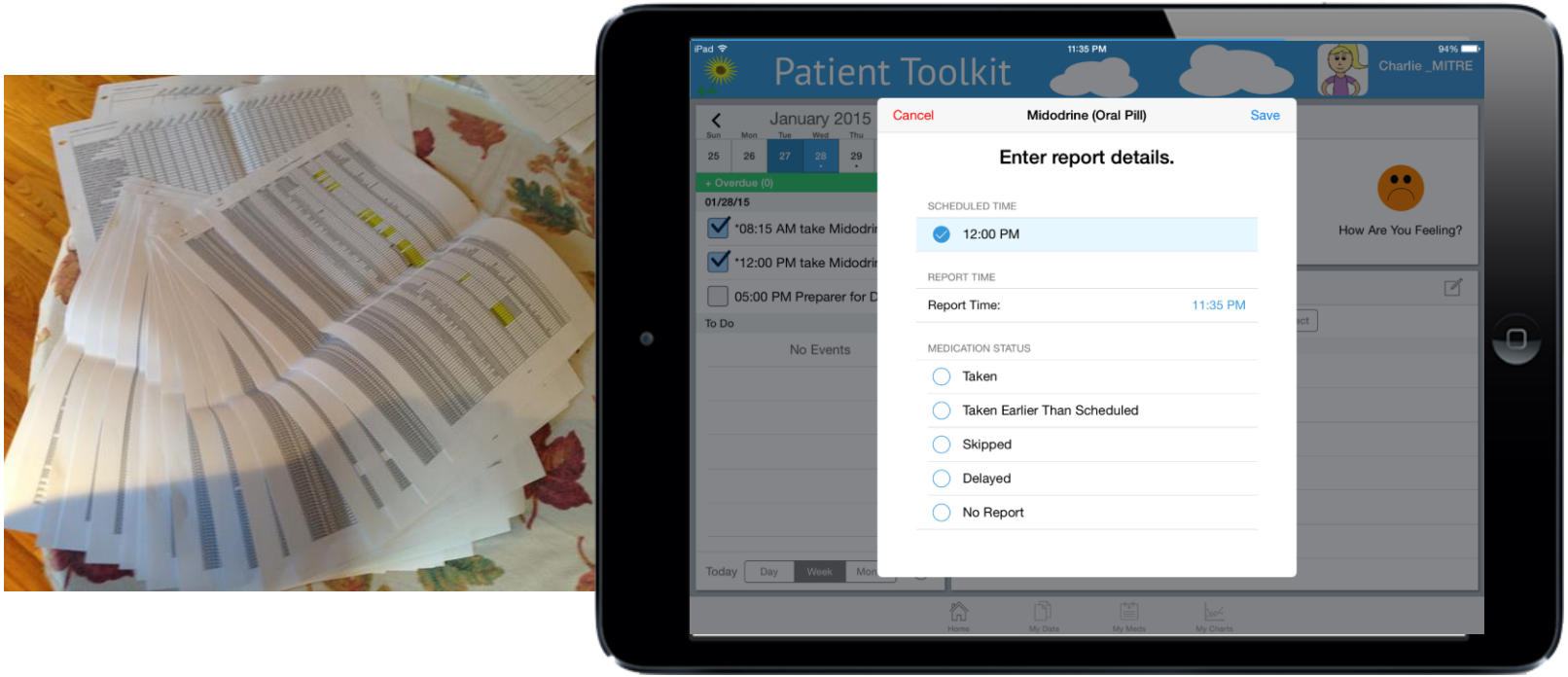

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Manage: Home Page

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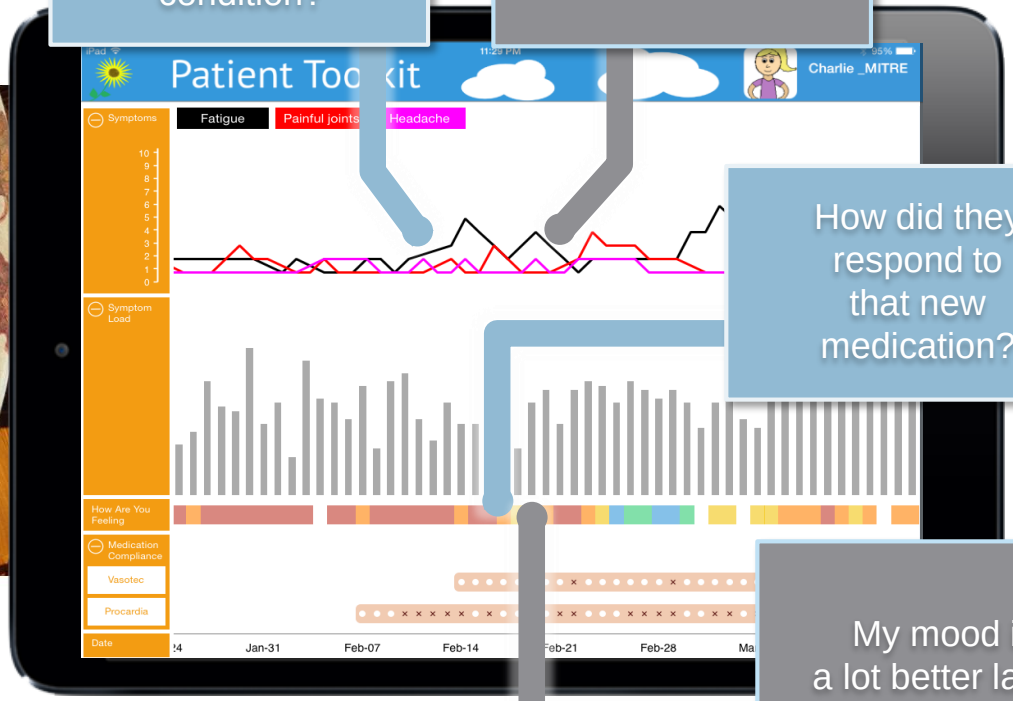
Share: Trends



Are they developing a new comorbid condition?

These symptoms are getting worse

How did they respond to that new medication?

My mood is a lot better lately

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Share: Layers of Detail

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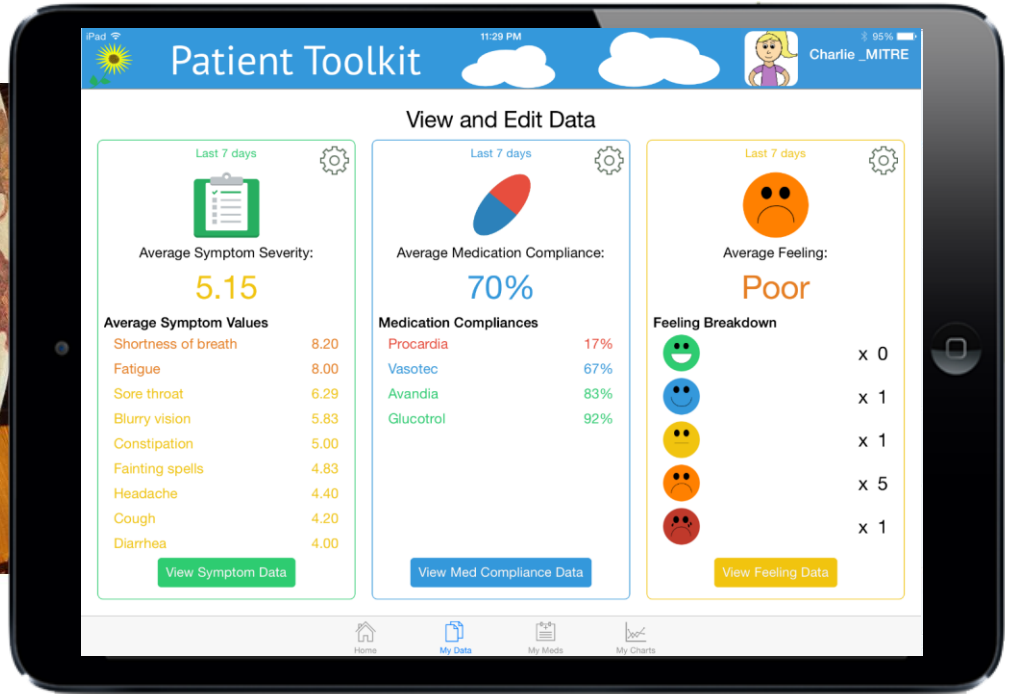
Share: Dashboard View



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Infrastructure Considerations

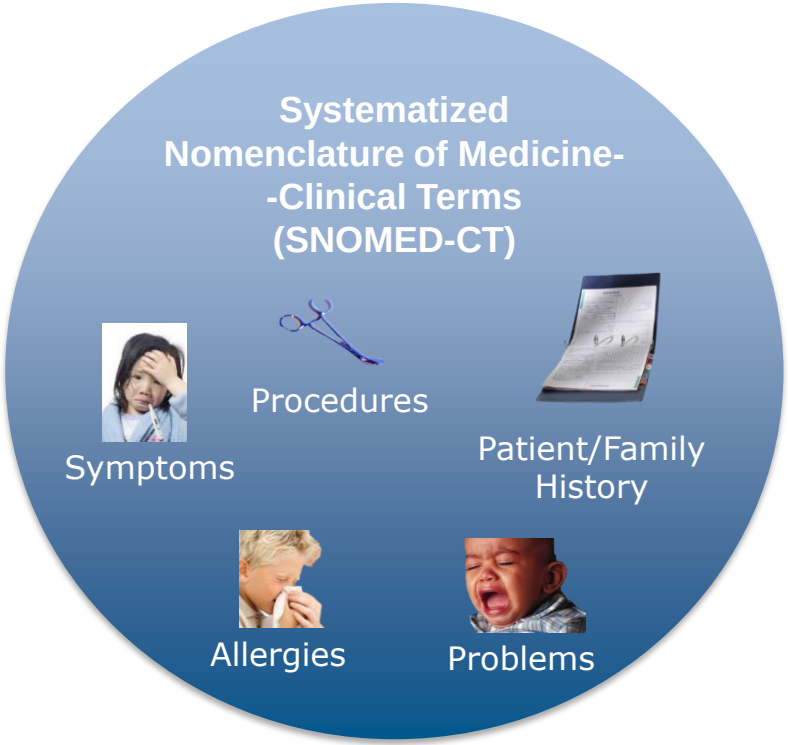
WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

Data Standards

Encrypted Database

Secure Login

Device agnostic capabilities



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Evidence from Providers

Source: MITRE Corporation/Heinz College Carnegie Mellon University Fall 2014 Capstone Project

Carnegie Mellon University Heinz College

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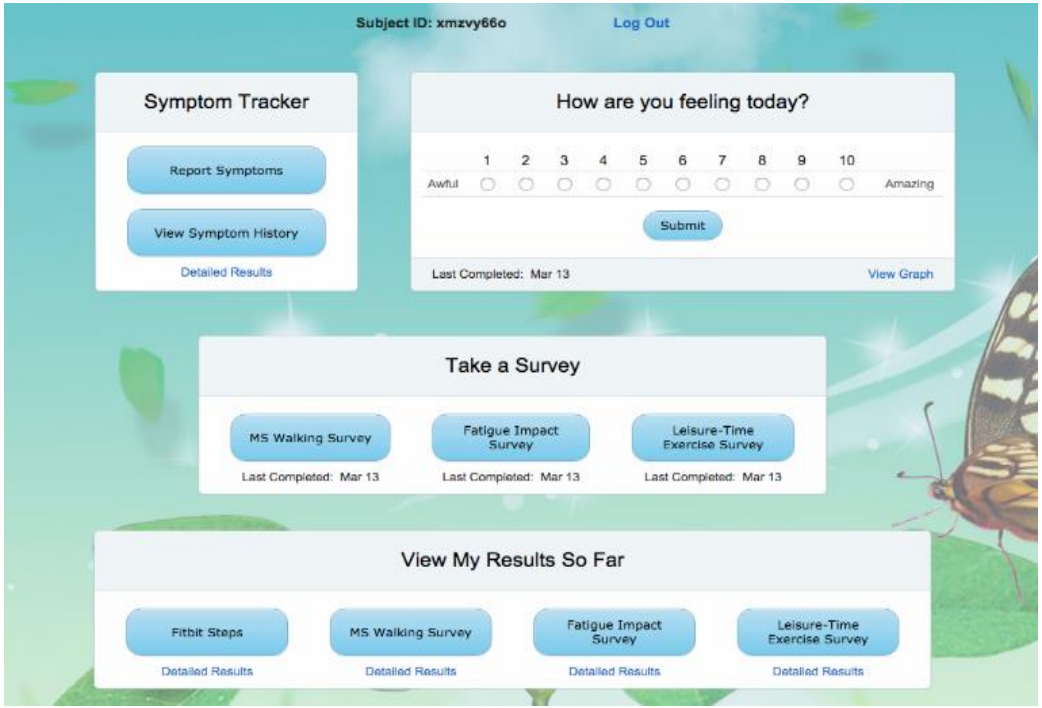
Evidence from Patients



Matthew M. Engelhard, Stephen D. Patek, Kristina Sheridan, John C. Lach, Myla D. Goldman. Remotely engaged: Lessons from remote monitoring in multiple sclerosis. International Journal of Medical Informatics. http://dx.doi.org/10.1016/j.ijmedinf.2017.01.006

- Remote collection of Patient Reported Outcomes: Reliable and Feasible
- Improved understanding of disease
- Potential to improve patient-centered care and communication between patient and provider
- Tailored content and other innovations needed to combat declining adherence

University of Virginia Engineering

University of Virginia Health System

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Patient Engagement Policy

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

Value Based Care

- **MACRA** introduced several reforms that will have a positive impact on patient engagement
- **MIPS** is an opportunity for providers to improve the quality of care they provide by engaging patients through the use of Patient Generated Health Data in the clinical setting
- Key tenet behind **Alternative Payment Models** is patient engagement

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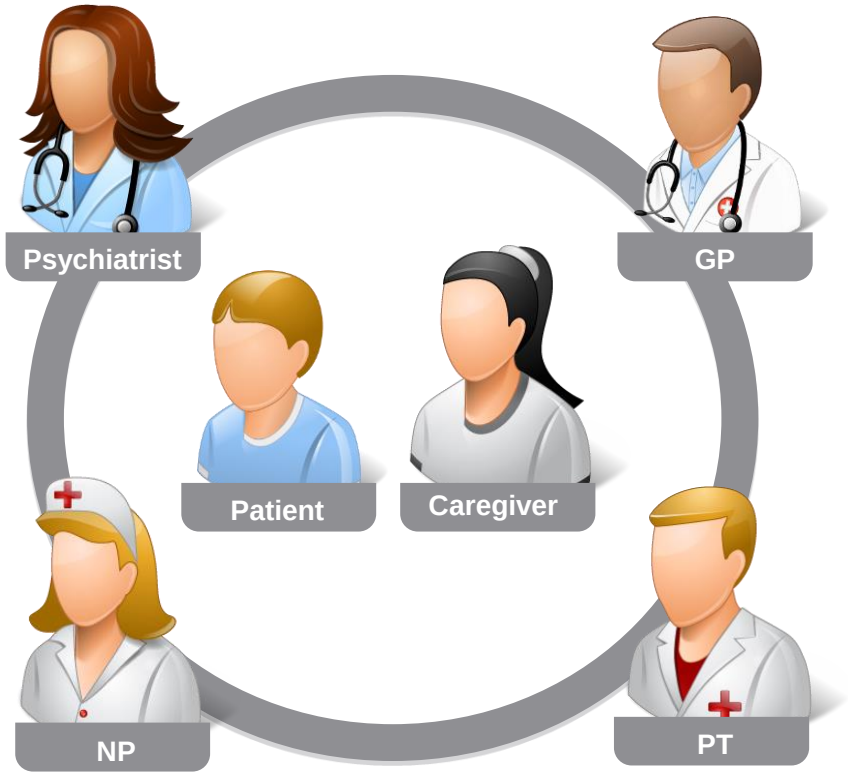
In Summary: Current State



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In Summary: Future State

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Questions

WHERE THE BRIGHTEST MINDS IN HEALTH AND IT INSPIRE ACTION

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