

# Engaging the care community with mobile technology

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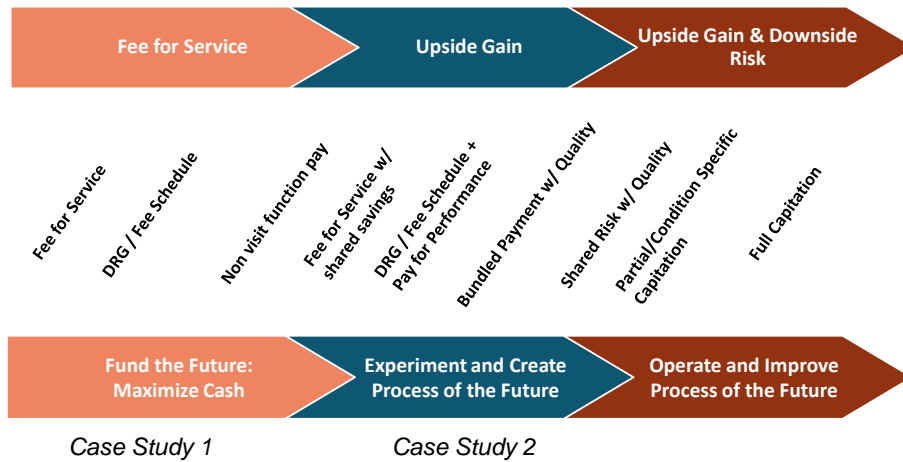
## Overview

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- Case Management
  - Re-imbursement Changes in Healthcare
  - The Opportunity of Shifting Population Risk Profiles
  - Chronic Disease is a Major Cost Driver
- Broader Care Community
  - Tools are Required: Technology Supports Complex Decision Models and Efficiency
  - The Concept of an Ecosystem Approach to Care Management
  - How to Utilize the Broad Care Community for Engagement with Mobile Technology
- Lessons learned
- Q&A

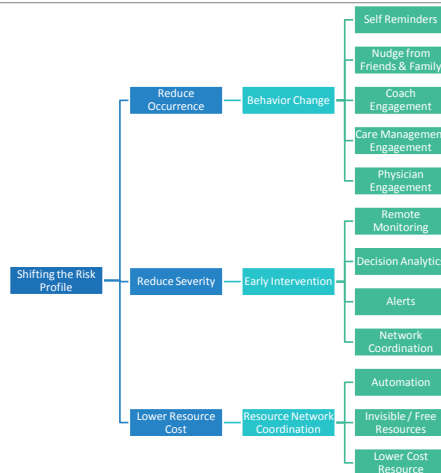
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## Re-imbursement Changes in Healthcare



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## The Opportunity Of Shifting Population Risk Profiles



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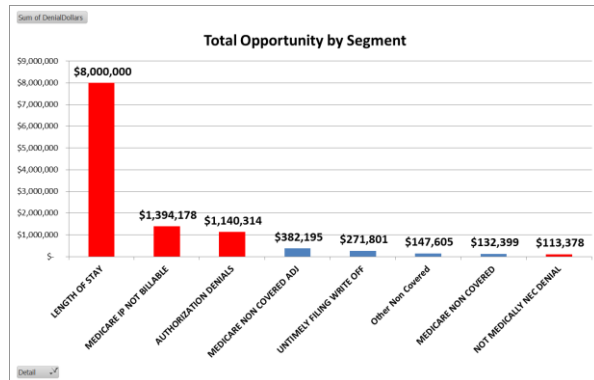
## Problem: Current Process Has Significant Issues

### Sample Problems Observed:

- Length of Stay too long
- Authorization denials
- Level of care denials (OBS/IP)
- Case Managers doing administrative tasks
- Poor coordination across care team
- Patients did not have what they needed when they arrived home
- Everyone did it differently
- Nursing hours overages

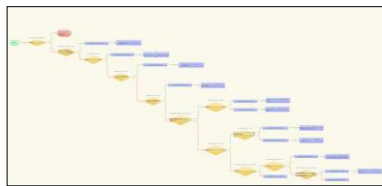
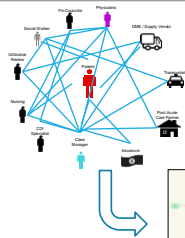
### Summation of Causes

- No standard process
- No / Poor work management
- Poor metrics / metrics management
- Unclear roles & responsibilities
- Poor execution of tasks
- Short staffing
- Information not up to date



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## Tools Are Required: Technology Supports Complex Decision Models and Efficiency



### Work Management for Case Management

*What resource works on what case at what time to minimize the total cost of delivery.*

# Mobile Technology Provides a Delivery Vehicle

## 1. Select Responsibilities

Modules

- Initial LOC Review
- Paper Contact
- Financial Counseling
- Clinical Review
- BP's Review
- CDI Review
- Physician Query
- LOS Review
- Care Team Briefing
- Discharge Planning

Units

## 2. Review Priority



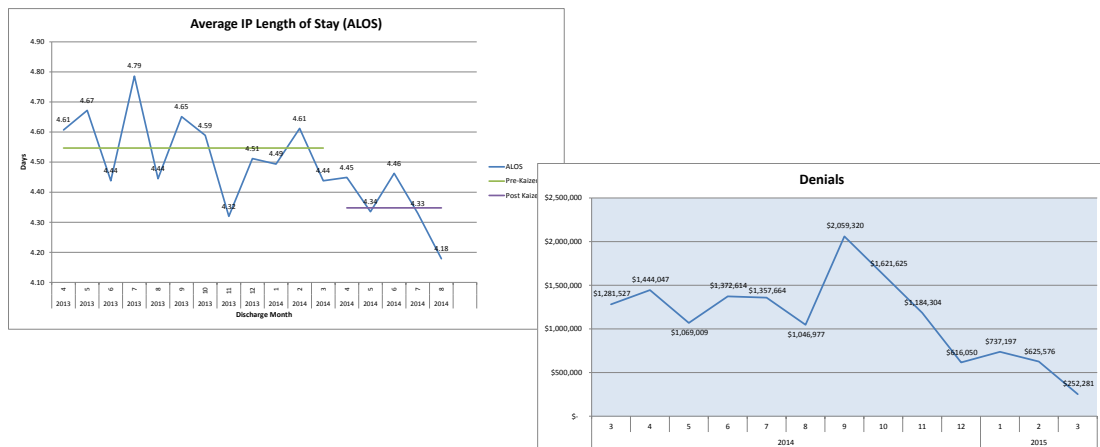
## 3. Work Case

Modules

- Initial LOC Review
- Paper Contact
- Financial Counseling
- Clinical Review
- BP's Review
- CDI Review
- Physician Query
- LOS Review
- Care Team Briefing
- Discharge Planning

Setup Case

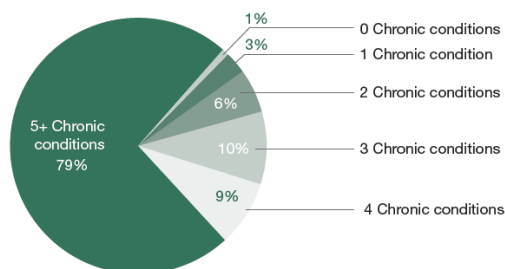
# The Project Delivered Significant Reduction in LOS and Denials



## Chronic Disease Is a Major Cost Driver

Two-Thirds of Medicare Spending Is for People With Five or More Chronic Conditions

Percentage of Medicare Expenditures



Source: Medicare Standard Analytic File, 2007

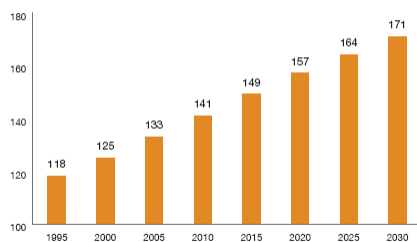
Robert Wood Johnson Foundation: Chronic Care: Making the Choice for Ongoing Care

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## Chronic Disease Management is Mission Critical

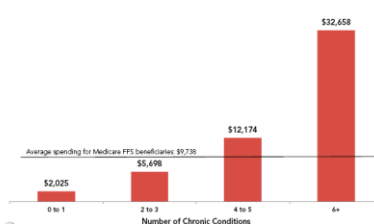
The Number of People With Chronic Conditions Is Rapidly Increasing

Number of People With Chronic Conditions (in millions)



Source: Wu, Shiao-Yi and Green, Anthony. *Projection of Chronic Illness Prevalence and Cost Inflation*. RAND Corporation, October 2000.

Figure 3.1a Per Capita Medicare Spending for Medicare FFS Beneficiaries by Number of Chronic Conditions: 2010

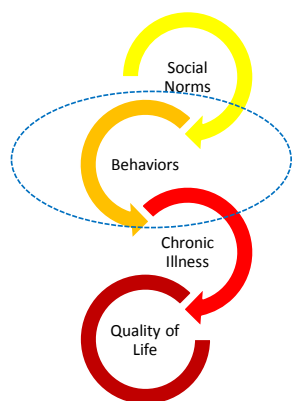


Source: Chronic Conditions among Medicare Beneficiaries, Chartbook 2012 Edition, CMS

Robert Wood Johnson Foundation: Chronic Care: Making the Choice for Ongoing Care

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## Behavior Change is the Holy Grail of Chronic Disease Management



**8 behaviors & risks drive 80% of total costs for all chronic illnesses worldwide**

*"Behavior change happens mostly by speaking to people's feelings..." -- Kotter*

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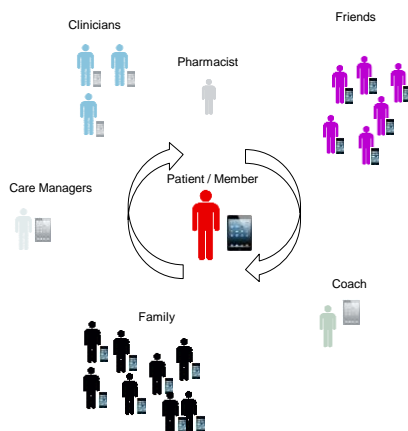
## Chronic disease management and behavior change implications – successful vs. un-successful models

### What has not worked:

- The white coat talk
- Providing 'information' to the patient
- Conflicting instructions from various clinicians

### What can work:

- At least 39,000,000 non-clinical caregivers in the US.<sup>1</sup>
- A patient's *social support system* is a key factor in defining their risk of readmission.<sup>4</sup>
- Socially isolated individuals incurred 24% *higher costs* than socially connected individuals with an equivalent risk.<sup>5</sup>



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# Expanding the definition of care community to include family and friends

## Keys to Change

A patients *social support system* is a key factor in defining their risk of readmission.

*Socially isolated individuals incurred 24% higher costs than socially connected individuals with an equivalent risk.*

At least **39,000,000** non-clinical caregivers in the US.

1. Relate
2. Repeat
3. Reframe



## Examples

### Delancey Street Foundation

- National Recidivism Rate: Approximately **68%** <sup>5</sup>
- Delancey Street Foundation Recidivism Rate : Approximately. **10%** <sup>6</sup>

### Dr. Dean Ornish Coronary Artery Study:

- Typical behavior change rate after discussion with clinician: 10% <sup>4</sup>
- Behavior change 2 years after program ended: 77% <sup>4</sup>

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# Tools for Non Clinical Care Givers are Sparse

EMR: \$22+ Billion

Figure 1: Global EMR/EHR market by major region (USD billion)



- Clinician focus
- Low frequency data
- Not useful in day to day management
- Complex and complicated to use
- No data with respect to behavior and lifestyle insights

PHR: \$400M?



- Care community focused
- High frequency data
- Involvement of social environment
- Day to day behaviors & lifestyle management tool
- User friendly / character model friendly
- Motivational – more than a “commercial / business / serious” tool

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## The concept of an ecosystem approach to care management



- Including all influencing aspects of care into one easy and simple solution.
- An ecosystem approach is inclusive of a series of persons and services that affect health.
  - Primary care physicians
  - Friends and family members
  - Specialists
  - Meal providers
  - Other community services

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## Mobile Technologies Can Benefit All Roles in Case Management



### Members or Patients

- Provide a single location to track everything (medications, biometrics, support needs)
- Receive support successful behavioral changes for better health



### Clinicians

- Have visibility to real time / continuous patient data
- Utilization of resources based on need
- Focus on patients with higher social risks
- Early intervention



### Family & Friends

- Communication and coordination for supporting a loved one remotely
- Support loved one with "nudges" to behavior change
- Peace of mind

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# How to utilize the broad care community for engagement with mobile technology

## Provide a series of enhancing functionalities within mobile technology

### Reminders

Receive reminders to take your measurements and medications

### Alerts

Receive alerts when someone forgets to take a medication or measurement

### Logs

Track your measurements and medications

### Requests

Request support needs from people in your community like rides, meals, and household help and provide support.

### Data Governance/Access

Choose what information you want to share with each individual in your community.



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## Lessons learned

The Smart people curse: Simple is hard

Governance: Data ownership and access rights

System inertia: Focus on the future is difficult while trying to stay alive today

Chronic disease reality: It is not a one at a time game

Money matters: Affordable Technology with affordable resources

Care spans all generations, socioeconomic and psychographics: Character models matter in design

Technology versus Service: High Tech + High Touch is the recipe

Technology versus Psychology: Harnessing engagement and activation via motivation

Connected Devices: Seniors require total ease of use when it comes to using mobile technologies.

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## Contact Information

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Mischa Dick & Marjorie Green  
Healthcare Excellence Institute, LLC  
21045 N. 9<sup>th</sup> Place, Suite 205  
Phoenix, AZ 85024

623.889.7124

[www.healthsignal.com](http://www.healthsignal.com) [www.healthcare-consulting.org](http://www.healthcare-consulting.org)

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## Questions& Discussion

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