Lower Readmissions
Improve Patient Satisfaction
Reduce Length of Stay
Improve Staff Satisfaction
Better Care.
Lower Cost.
December 4, 2013
Leveraging Mobile Care Coordination Technology to Improve Care Transitions

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The Problem

A patient admitted to a hospital will experience:

- **20-40 Care Providers**
- No “team” - **Silos of Care**
- **1-in-10** Chance of Harm\(^1\)
- **1-in-5** Chance of Readmission\(^2\)
- Communication Failures Drive **70-80% Errors**\(^3\)

Cost to the Nation: **$25B - $45B Annually**\(^4\)

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Why is this challenging?

Care must be evidence-based and patient-centered…

coordinated and timely…

But the care team is diverse, constantly changing, and on-the-go!
Our Approach

1. Connect Entire Team on Mobile devices
   Patient-centered multidisciplinary care teams

2. End-to-End Evidence-based\(^1,\)\(^2\)
   Proven inpatient, post-discharge & “BYO” interventions

3. Collaborative Model
   Work with surrounding area care providers

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\(^1\) Project RED - Re-Engineering Discharge, Boston University Medical Center.

\(^2\) Project BOOST – Better Outcomes for Older adult Safer Transitions, Society of Hospital Medicine.
Carebook: The GPS for Care Teams™
Collaborative, Patient-centered, Evidence-based

Carebook: Mobile Care Navigation Network
Collaborative Model for Transitions

Nation’s FIRST Mobile Care Transitions Network™
Team & Evidence-based Multidisciplinary Approach

Project RED® + CTI® + Carebook™

Admit

- Set est. Date of Discharge & Disposition

Hospital Stay

- Notify team of Discharge in 24

- Assess Discharge Barriers & Risks

- Reconcile Meds

Discharge

- Reconcile Meds

- Follow-up Appointments

- Team Risk

- Home Visit

- Follow-up Calls

Post-Discharge

- Coach

- Follow-up Calls

MD, MRT

- Reconcile Meds

Team

- Team

MD

- Complete all patient risk-specific interventions. Engage patient & caregiver using Teach-back

RN

- Team

Follow-up Calls

High

Sup. RN

Rest
How It Works

Assess & Plan

Coordinate

Follow-up & Monitor

Inpatient Care Team

Aftercare Providers (Clinic, Coaches, Care Managers etc.)

Please confirm that you have your medications

High Risk

Low Risk
Carebook Concepts I
Shared, Dynamic Checklists with Real-Time Notifications*

- Limited Social Support
- 2+ Hospitalizations in 6 months
- Substance Abuse
- Limited Transportation
- Cognitive Impairment
- No PCP
- Limited or No Insurance
- Failed Teach-back

Patient Hart Payne
Est. Discharge on 9/5/13
Identify support resources

Social Worker

Patient Hart Payne
Est. Discharge on 9/5/13
Check coaching eligibility

Coach Coordinator

*Patent Pending
Carebook Concepts II
Care Team Collaboration*

- Instantly identify care team
- See who is on/offline
- Select one or more for messaging

Reach care team members
Know when they read your message
Get instant response

*Patent Pending
Hospital Mobile Technology Deployment

Hospital purchased devices for staff
- iPads for Case Managers, Social Workers, Coaches
- iPodTouches for others – Nurses, Ancillary staff…

Physicians used personal iPhones (BYOD)

Coaches used iPads with keyboards

Secure charging docks at Nursing Stations

See-through Cases & Screen covers

Mobile device usage policy drafted
Implementation Phases

1. Multidisciplinary root-cause analysis
   Identify opportunities & interventions for improvement

2. Multidisciplinary build team for “designing” the tool
   Make it theirs

3. Training across the organization
   Hands-on, Videos, Posters, Pocket guides, Trainer walk-the-halls

4. Pilot Unit Deployment
   Start with a small unit and subset of roles

5. Go-Live
   It’s a big deal. Make it exciting
INTRODUCING COAST@MARIN

COLLABORATIVE FOR OLDER ADULTS SAFE TRANSITIONS

COAST@Marin is a program to help older adults to safety navigate through transitions from care at the hospital to their homes or aftercare providers.

Key Components

PROJECT RED®
A program that educates patients 65 and older about their diagnosis and care during their hospital stay and prepares them for a safe and smooth discharge

CARE TRANSITIONS & INTERVENTION®
A collaborative program that provides select older adults with a community agency coach to assist in a successful transition after hospitalization

CAREBOOK
A HIPAA-compliant mobile tool accessible via the web or mobile device (iPad, iPhone, etc.) that enables all members of a care team to connect and coordinate seamless patient care, both in and out of the hospital

COAST@Marin will launch in the coming months.

Watch for details in MGH Connections e-Newsletter or for more information, email Terry Winters, director of the program: wintert@maringeneral.org.

Making discharge safer for patients over 65

Project RED is interested in making the discharge process safer and more effective for all our patients. But for the most vulnerable patients, Project RED may not be enough. Over half of Marin General Hospital discharges are patients aged 65 or older. In 2010, 11.4 percent of patients in this age group were readmitted within 30 days, and 23.4 percent were readmitted within 90 days. While these numbers are better than the national average, they can definitely be improved upon.

The challenges of caring for the elderly

A case review of our elderly discharges revealed that 75 percent couldn’t verbalize critical information.
The Proof
### More Efficient Care Delivery

<table>
<thead>
<tr>
<th>Staff Surveys</th>
<th>Before Carebook</th>
<th>After Carebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I can easily determine the names of all care team members for my patients”</td>
<td>32%</td>
<td>69%</td>
</tr>
<tr>
<td>“I can easily or efficiently contact all members of my patient’s care team to notify them about discharge plans” (MDs)</td>
<td>8%</td>
<td>72%</td>
</tr>
</tbody>
</table>

% of staff who chose “agree” or “strongly agree”
Better Communications in Less Time

80% communications were in patient context

65% reduction in pages
More Follow-ups Scheduled

One-touch electronic referral to safety-net clinic (Marin Community Clinic)  
More appointments being scheduled prior to discharge
More Coaching Referrals

No. of Patients Referred to CTI per month

<table>
<thead>
<tr>
<th># Patients</th>
<th>Before Carebook</th>
<th>After Carebook</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80</td>
<td>112</td>
</tr>
</tbody>
</table>

40% increase in patients referred with Carebook
Medication Discrepancies Intercepted

13% of coached patients had a medication discrepancy discovered.
Improved Readmission rates, HCAHPS, ALOS & more

Better Care

- **readmissions**: \( 22\% \)
- **patient satisfaction**: \( 18\% \)
- **6,000 patients** received better care over eight months

Lower Cost

- **ALOS**: \( \frac{1}{2} \) day
- **extra clinician time**: 60 min

Staff Morale & Productivity:

- "I feel naked without my Carebook" – RN Case Manager
- "I don’t know how I would live without it" – Bedside Nurse
- "I love Carebook!" – Hospitalist MD
What have we learned?
The Gems

Multidisciplinary approach eases adoption

“We built it together”

Ancillary clinical staff love it (speech, RT, PT etc.)

Viral adoption of communication due to efficiency

“I want to be on Carebook”

Carebook: a dynamic tool for front-line innovation

Rapid PDSA cycles with real-time performance tracking

Safer & Efficient care transitions