HEALING IN PLACE: USING TECHNOLOGY TO REDUCE READMISSIONS

Erick A. Eiting, MD, MPH, MMM
Administration Fellow, Emergency Medicine
University of Southern California

Laura Mitchell
Vice President, Business Development
GrandCare Systems
Medicare in the ER

- 57 percent of Medicare admissions through ER
- 43 percent of admissions
- 48 percent of ICU admissions
- 20 percent greater LOS
- 50 percent more labs and radiology
- 400 percent more social services interventions
2010 Consensus Data

- Over 40 million Americans age 65 or greater
- 65+ growing faster than entire population
- 85+ growing THREE times faster
- “Elderly” patients becoming more heterogeneous
More Complex Care

- More co-morbid conditions
- More vulnerable to illness
- Poly-pharmacy
- More frail patients, fall risk
- Risk of dementia while in the hospital
- Social situations a factor
“Left Shift of Care”
Inpatient to Outpatient

Source: Eric Dishman, Intel Digital Health Group
Outpatient Follow-Up

Figure 2. Patients for Whom There Was No Bill for an Outpatient Physician Visit between Discharge and Rehospitalization.

Data are for patients in fee-for-service Medicare programs who were discharged to the community between January 1, 2003, and December 31, 2003, after an index hospitalization for a medical condition. Data are derived from claims maintained in the Chronic Condition Data Warehouse of the Centers for Medicare and Medicaid Services.
Living alone (50 percent)

Unmet functional needs (48 percent)

Lacking self management skills (44 percent)

No high school diploma (42 percent)

Income/Age/Minority status/Gender (??)
For the Elderly, Emergency Rooms of Their Own

Yana Paskova for The New York Times

A simulated skylight in the new geriatric emergency room at Mount Sinai Hospital is intended to help patients with end-of-the-day agitation and confusion.
A dedicated Geriatric ER
Pharmacist review for harmful drug interactions
Fall risk assessment and intervention
24-36 hour phone outreach
RESULT: Reduce 30-day revisits (from 20% to 1%)
Creating Geriatric “Centers for Excellence”
Screening for “at risk” seniors
Fall Risks
CAUTI and hospital-acquired infections
Wound care
DNR/POLST and Palliative Care
Discharge Instructions
High-Risk for Readmission

- CMS Defined Conditions:
  - Congestive Heart Failure
  - Pneumonia
  - Acute Myocardial Infarction

- Those identified as “high-risk” while inpatient

- TECHNOLOGY CAN BE THE ANSWER
PRODUCTIVITY
Making Healthcare affordable
Drugs don't work in patients who don't take them

C. Everett Koop, MD
Medication Assistance

Medication Schedule

<table>
<thead>
<tr>
<th>Name</th>
<th>Day</th>
<th>Timeframe</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthroid</td>
<td>Every Day</td>
<td>6:00am to 8:00am</td>
<td>Thyroid replacement</td>
</tr>
<tr>
<td>Plendil</td>
<td>Every Day</td>
<td>6:00am to 8:00am</td>
<td>Reduce chest pain</td>
</tr>
<tr>
<td>Lipitor</td>
<td>Every Day</td>
<td>4:00pm to 7:00pm</td>
<td>Reduces cholesterol</td>
</tr>
<tr>
<td>Lanoxin</td>
<td>Every Day</td>
<td>4:00pm to 7:00pm</td>
<td>Strengthen the heart</td>
</tr>
</tbody>
</table>

Medication Details

- **Generic Name**: Lipitor
- **Specific Name**: Atorvastatin
- **Simple Name**: Cholesterol Pill
- **Doctor**: Dr. Porter
- **RX Number**: 321-055sf

Dosage: pill - 10mg
Directions: By Mouth
Purpose: Reduces cholesterol

There are no medications that need to be taken at this time.
Caregiver Coordination

Dashboard for Mary Smith

- Account: Mary Smith
- Primary User: None

327 N. Main St.
West Bend, WI 53095
(262) 338-6147

- Open Caregiver Menu
- Open Pictures Menu
- Open Letters Menu

Latest Care Coordination Notes

- Night Time
  - Bob @ 01/26/12 12:28pm CST
  - I have noticed from the motion graphs that mom has been making a lot of trips to the bathroom at night. We should take a look to see if anything else has changed.
  - Ever since those night time trips have increased, she has been sleeping more and more in the afternoon.

- CHF Assessment
  - [N/A] @ 01/26/12 12:27pm CST
  - How is your energy level?
    - I'm OK
  - Have you noticed any swelling of your ankles?
    - No, none
  - Are you having trouble breathing?
    - No, not at all
  - Are you ever dizzy?
    - No, never feel dizzy
  - Are you urinating frequently at night?
    - Maybe a bit more often than usual
Chronic Conditions

Wellness Rules

IF Weight is taken
THEN show message Weight Taken

IF Weight is taken
THEN send email to kkb@grandcare.com

IF Weight is not taken from 6:00am-7:00am
THEN send email to kkb@grandcare.com

IF Blood Pressure Reading is taken
THEN show message BP Taken

IF Blood Pressure Reading is taken
THEN send email to kkb@grandcare.com

IF Weight is not taken from 6:00am-7:00am
THEN send text message to Account Manager

IF Blood Pressure Reading is not taken from 10:15am-10:45am
THEN send text message to Account Manager

Add New Rule

Blood Pressure

Ave: 112/78 : 74
High: 114/86 : 79
Low: 111/84 : 71

Quality Assurance

GrandCare Systems

May, 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Systolic</th>
<th>Diastolic</th>
<th>Pulse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thu 12th</td>
<td>3:12 pm</td>
<td>111</td>
<td>64</td>
<td>71</td>
</tr>
<tr>
<td>Tue 17th</td>
<td>9:54 am</td>
<td>112</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>1:00 pm</td>
<td>114</td>
<td>88</td>
<td>72</td>
</tr>
</tbody>
</table>

Weight

Ave: 151.9
High: 152.2
Low: 151.4

Quality Assurance

GrandCare Systems

May, 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thu 12th</td>
<td>3:03 pm</td>
<td>182.2</td>
</tr>
<tr>
<td></td>
<td>3:34 pm</td>
<td>152.2</td>
</tr>
<tr>
<td>Fri 13th</td>
<td>10:37 am</td>
<td>161.4</td>
</tr>
</tbody>
</table>
Red Flag Symptoms

Motion Rules

- IF No motion for 24 hours at ALL DETECTORS
  THEN contact Call List Daytime

- IF Wandering motion detected from 10:00pm-6:00am
  THEN send email to ALL Caregivers

- IF Excessive motion from midnight:5:00am for more than 30 minutes at Master Bathroom
  THEN send email to ALL Caregivers

- IF Any motion from 11:00pm-6:00am at Gaytha's bedside
  THEN turn on Bathroom hall light (Master bathroom)

- IF No motion from 6:00am-9:00am at Pill drawer
  THEN

Motion Wizard

Define action

Please define action to be taken

IF from 6:00am-8:00am there is no motion at Bedroom

THEN Contact call list
  then
  thanksgiving weekend
everything's fine
  emergency
  night time
  Add Managed Action
  Refrigerator

Optional Explanation: Mom didn't get out of bed this morning

Add New Rule

GrandCare Systems

Daily Motion

- Refrigerator
- Daily Graph

GrandCare Systems


- Dining Room
- On dining room table
- b7

- Bathroom
- Pill drawer
- b9

- Kitchen
- Refrigerator
- k11
HEALING IN PLACE™
Self Care, Managing Chronic Conditions & Reducing the Risk of Hospital Readmissions Using Digital Technology

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Laura Mitchell
VP Biz Dev
GrandCare Systems
laura@grandcare.com
262-338-6147

Facebook.com/GrandCareSystems

info@grandcare.com www.grandcare.com