

# UCSF Complex Discharge Planning Rounds

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University of California, San Francisco

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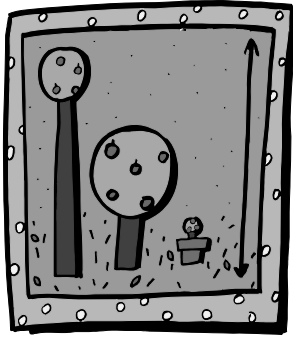
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## Not “low hanging fruit”

CDPR



Multi-disc rounds  
Whiteboard use  
Discharge tickets  
Discharge appts

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## UCSF Medical Center

- Large academic medical center
  - 350 adult beds
  - 180 children’s beds
  - Off-site 85 bed hospital
- Provides primary and specialty care to San Francisco and specialty, tertiary care to the communities of Northern California



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### Complex Discharge #1

- 57 y/o F DM, ESRD on HD, OSA, COPD and anoxic brain injury from PEA arrest
- Complex d/c issues:
  - Trach
  - Dialysis
  - Attendant care
  - VRE, MRSA
  - Poor family support

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### Complex Discharge #2

- 60 y/o M transferred to UCSF with bowel perforation from metastatic gastric CA. Total gastrectomy with complicated post-operative course. Felt by all services to be appropriate for palliative/hospice care.
- Complex d/c issues:
  - Multiple drains
  - No insurance
  - No family or friends able to assist with care

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### CDPR: Goals

- Identify treatment and discharge plans for patients with prolonged LOS
- Establish safe discharge plans for patients with complex needs
- Establish linkage for uninsured patients
- Utilization review
  
- Complex = medical, psychosocial, financial

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### CDPR: Attendees

- Care Coordination
  - Director
  - All Social Workers and R.N. Case Managers
  - Analyst
- Physicians
  - CMO
  - Physician Advisor to Care Coordination
- Rehab Services
  - Supervisor
- Nursing
  - Patient Care Director
  - Nurse Managers
- Admissions
  - Director of Finance
  - Director of Transfer Center
- Contracting



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### CDPR: Patient Selection

- Patients from any service with:
  - LOS >7 days
  - Anticipated difficulties with discharge due to medical, psychosocial or financial needs
  - Transferred to UCSF from a referring hospital
  - No insurance
  - Frequent re-admissions
  - Delays in service

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### CDPR: Structure of Rounds

- Weekly, 1 hour meeting
- > 25 patients discussed
- Brief presentation by social worker or case manager
- Discussion, brainstorming
- Establish follow-up and accountability
- Real time data entry in case management program

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## CDPR: Sample list

**Patient Name:**  
**Transition Manager:** Berke, M  
**Discharge Manager:** MED TEAM C  
**Service Line:** A537 / B  
**Room/ Bed:** 30 +  
**LOS:** 30 +

**CC Level:** Refused by HC/SNF/Rehab  
**COB 1:** SELF PAY NO RSRCS/CHARITY  
**Attending Phys:** RAKHLIN, NINA , MD  
**Admit Source:** Emergency Department  
**Pt. ID:** XXXXXXXXXX

**Patient Name:**  
**Transition Manager:** OHara, K.C  
**Discharge Manager:** NSX  
**Service Line:** 824 / A2  
**Room/ Bed:** 12 +  
**LOS:** 12 +

**CC Level:** Discuss DC or Transfer Plan  
**COB 1:** MEDI-CAL  
**Attending Phys:** BARBARO, NICHOLAS M  
**Admit Source:** Transfer Acute Hospital  
**Pt. ID:** XXXXXXXXXX

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## CDPR: Role of Technology

- Case management software
- Easy to generate, maintain, distribute list of patients for review
- Track patients with specific needs and problems
  - # waiting for SNF
  - Avoidable days (OR delay, d/c delay)
- Easy to generate reports

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## Secondary Benefits

- Sharing of information and expertise within and among disciplines
  - Brainstorming
  - Education (home care, hospice, insurance)
- Identify and address internal and external barriers
  - Establish bed hold at local SNF
  - Transfer back project
  - Letters re: delays in care
- Improved routine discharge planning

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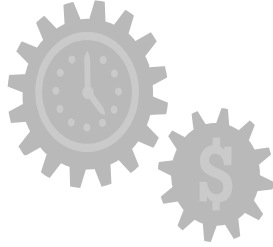
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## Cost

- Cost
  - Care coordination time
- Savings
  - Hospital days
  - No data



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## Lessons Learned

- Inter-disciplinary collaboration and sharing of information is key
- Technology can augment good systems
- Find the right people to have at the table
- Keep refining even when it seems like things are going well

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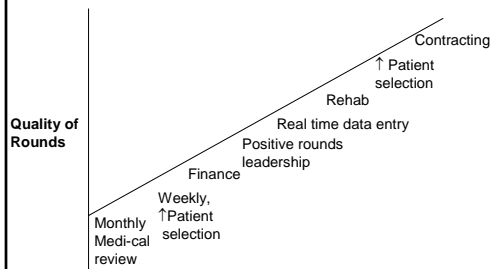
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## CDPR: A Work in Progress



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**Discharge Workshop**

**Medication Reconciliation &  
Patient Education**

Eric E. Howell, M.D.  
Johns Hopkins Bayview Medical Center

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**Discharge Workshop**

The interventions discussed have been developed as part of a study on elderly patients though an SHM grant, sponsored by the Hartford Foundation

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**Background**

- Medication errors\*
  - one of the leading causes of injury to hospital patients
  - over half of all hospital medication errors occur at the interfaces of care
- Older patients have been shown to†:
  - continue medications discontinued during the hospital stay
  - fail to start new medications
  - take incorrect dosages
  - lack an understanding of the hospital process

\* Rozich, Medication safety: One organization's approach to the challenge. JCOM. 2001;8:27-34.

† Gray, Medication Adherence in Elderly Patients Receiving Home Health Services Following Hospital Discharge. Ann Pharmacother. 2001;35:539-45.

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## Background

- 2006 JCAHO mandates medication reconciliation:

a formal process of obtaining a complete and accurate list of each patient's current home medications — including name, dosage, frequency and route — and comparing admission, transfer, and/or discharge medication orders to that list. Discrepancies are brought to the attention of the prescriber and, if appropriate, changes are made to the orders. Any resulting changes in orders are documented.

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## Med Recon in a Nutshell

Medication Reconciliation involves three steps:

1. **Verification** (collection of medication history)
2. **Clarification** (ensuring that the medications and doses are appropriate)
3. **Reconciliation** (changes to orders or reason for differences)

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## Designing Intervention Tools

- How to address upon discharge:
  - medication reconciliation
  - patient understanding (meds, disease process, hospitalization)
- Intervention ideas:
  - standardized medication review:
    - admission & discharge
  - AND patient education

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## Description of Intervention at Johns Hopkins Bayview

### Medication Reconciliation:

- 1. Verification**
  - Collection of medication history; verified by patient or PCP
- 2. Clarification**
  - Ensuring that the medications and doses are appropriate on discharge
- 3. Reconciliation**
  - Changes to orders or reason for differences, pharmacy review
- 4. Patient Education**
  - Disease process, meds, hospital stay, transition care

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## Verification

- Collection of medication history documented in chart by physicians
- Confirmation of medication list with either patient and/or primary physician by second party

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## Clarification/Reconciliation

- Using an inpatient pharmacist with interest / expertise in Geriatrics
- Pharmacy reconciliation within:
  - Within 24 hours of admission
  - Within 3 business days after discharge
- Use of assessment tool (D.I.A.N.A.), or equivalent:
  - Dose Adjustments
  - Interactions
  - Appropriateness of medication use per medical indication
  - Noxious & Hazardous Medicines for the older adult
  - Adverse Drug Reactions
- Pharmacist reports concerning findings to hospitalist

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## Documentation

The screenshot shows a software interface for medication management. At the top, there is a 'Safe STEP' logo and text: 'PRESCRIPTION MEDICATIONS - REMINDER to ask about non-pharmaceuticals, e.g. inhalers, insulin... OTC MEDICATIONS - REMINDER to ask about OTC vs. Rx medication, & dosage HERBALS'. Below this is a navigation bar with 'Page 1 of 1', 'Short list acceptable', 'Discrepancy with Home List', 'SAME - continued med. does freq', and 'X - stopped med'. The main area is a grid with 10 columns and 10 rows, used for tracking medication status.

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## Patient Education

- Discharge appointment
  - Physician and patient make "appointment" to meet, while in hospital, within 24 hours of D/C
  - Time to gather family, health care agent
  - Questions can be written down a priori by patient and caregivers

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## Patient Education

- Discharge appointment continued
  - Pictorials for illiterate
  - Extensive education about:
    - medications
    - diagnoses
    - test results
    - prognosis
    - what to expect after discharge
  - Medication dry run
- Physician and patient review & sign "agreement"

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## Patient Education

- Physician-Patient “Agreement”
  - Better defines role of physician and patient during transition home
  - documents that key steps were completed in D/C appointment

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**PATIENT-PHYSICIAN DISCHARGE AGREEMENT**

|  |   |
|--|---|
| <p><b>I, the patient agree to:</b></p> <ul style="list-style-type: none"> <li>✓ Be involved in decisions about what will take place after I leave the facility</li> <li>✓ Understand where I am going after I leave the facility and what will happen to me once I arrive</li> <li>✓ Have the name and phone number of a person I should contact if a problem arises during my transfer</li> <li>✓ Understand what my medications are, how to obtain them, and how to take them</li> <li>✓ Understand the potential side effects of my medications and whom to call if I experience them</li> <li>✓ Understand what symptoms I need to watch out for and who to call should I notice them</li> <li>✓ Understand how to keep my health problems from getting worse</li> <li>✓ Make sure my doctor, physician's assistant, nurse practitioner or nurse has answered my most important questions prior to my leaving the facility</li> <li>✓ Let my family or someone close to me know that I'm coming home and what I will need once I get there</li> </ul> <p>Patient Signature _____</p> | <p><b>I, your physician agree to:</b></p> <ul style="list-style-type: none"> <li>✓ Provide you with contact information of someone after your discharge that can answer questions or concerns about this hospital stay</li> <li>✓ Schedule a follow up appointment with a doctor prior to your discharge</li> <li>✓ Discuss with you and/or a care provider your medical fitnesses</li> <li>✓ Discuss with you and/or a care provider important hospital testing</li> <li>✓ Ensure that your medications are accurate and reviewed for safety</li> <li>✓ Have your discharge ready by 11:00 AM whenever possible</li> </ul> <p>Doctor Signature _____<br/>                 Print Name: _____<br/>                 Date: _____</p> |
|--|---|

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## Measurement of Systems

- Study in progress
- No data as yet
- Data points (3 and 30 days):
  - LOS
  - Time of day discharge
  - Re-admit rates
  - Medication compliance
  - Patient understanding
  - Patient satisfaction

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**Lessons Learned**

- In general:
  - Don't bite off more than you can chew!
  - Be open and flexible to ideas
  - Study documents are always evolving
  - Get buy-in from key stakeholders before you start, they can easily cause delay

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**Lessons Learned**

- Medication Reconciliation:
  - Determining definition and measurement points challenging
  - Assessment tools lacking
  - No small effort to study or change

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**Lessons Learned**

- Patient Education
  - Take into account medical "illiteracy"
  - The more practical the better
    - "dry runs"
    - pictures

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**Re-Engineering the Hospital Discharge  
for Safety and Accountability:  
Introducing the Discharge Advocate**

Jeff Greenwald, MD  
Co-Investigator, Project RED  
Boston Medical Center  
Society of Hospital Medicine  
Annual Conference  
May 5, 2006

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**Overview:**

- Background of Project RED
- Introducing the Discharge Advocate
- The study: methods and measurements
- Lessons learned...and keep learning

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**The problems:**

- High rates of complications around discharge
- By 30-days:
  - 19.7% patients re-hospitalized
  - 17% patients visited ED

**The questions:**

- Can improving the discharge process reduce adverse events and decrease unplanned rehospitalizations?
- What is the “discharge process?”

**The answer:**

- AHRQ Funding!

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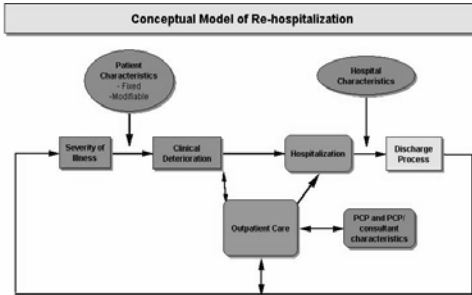
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### Factors influencing re-hospitalization




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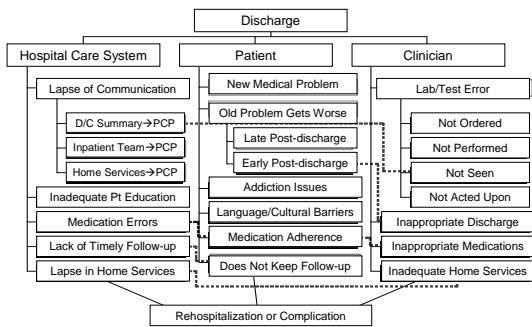
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### Factors influencing re-hospitalization




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### Probabilistic Risk Assessment Pilot Data



| Variable             | Not Readmitted | Readmitted | p-value |
|----------------------|----------------|------------|---------|
| Age                  | 50.6           | 54.1       | <.001   |
| Length of Stay       | 3.5            | 4.3        | <.001   |
| Charlson Index       | .52            | .79        | <.001   |
| No. Prior Admissions | .31            | 1.2        | <.001   |

| Risk factor             | Adjusted Odds Ratio (95% CI) | P-value |
|-------------------------|------------------------------|---------|
| SF-12 Physical function | 0.95 (0.90-1.01)             | 0.07    |
| PHQ-Depression          | 2.08 (1.03-4.19)             | 0.02    |
| Norbeck Social support  | 1.00 (0.99-1.01)             | 0.47    |

- Fri-Sun discharges readmitted more than Mon-Thu
- No f/u appt scheduled readmitted more than w/appt

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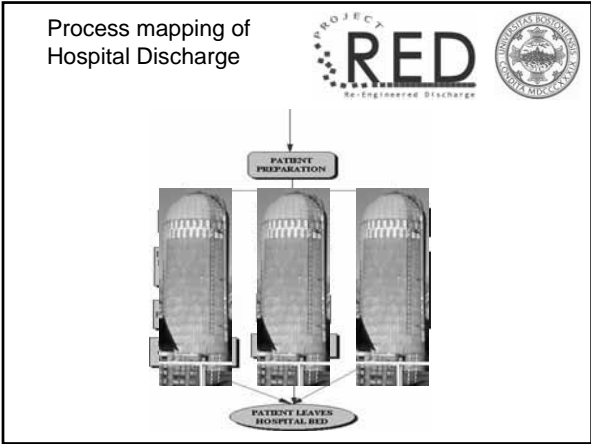
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**Principles of the Newly Re-Engineered Hospital Discharge**

Conclusions of FMEA

Re-engineered Discharge must contain:

- Roles and responsibilities
- Patient education throughout
- Easy Information flow
- Full time case management services
- All discharge information in patient's language and literacy level.

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## Principles of the Newly Re-Engineered Hospital Discharge



- Written discharge plan:
  - Medications, diet, and lifestyle modifications
  - follow-up care
  - patient education re their disease
  - what to do if their condition changes
  - completed before discharge
- Post-discharge plan reinforcement
- Organized information delivered to the PCP
- Process measures, benchmarks, and QC

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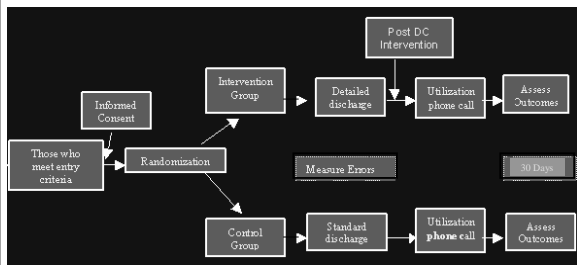
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## PIPS-RED: The current study




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## The Intervention Group



### The intervention:

- The Discharge Advocate (D.A.) during admission
- After Hospital Care Plan
- A scripted follow-up phone call from a pharmacist 2-3 days after discharge
- Access to the D.A. by phone, after discharge




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## The Role of the DA



- Coordination with medical team, RNs, and Case Managers
- Educating patients about their disease
- Arranging aftercare with patient & family
- Reinforcing national quality guidelines
- Medication education & reconciliation
- Arrangements for medication pick-up, rides, DMA
- Preparing & reinforcing After Hospital Care Plan with patient & family
- Data collection tools are scripted for consistency
  - REALM (literacy)
  - Depression Screen (PHQ-9)

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**After Hospital Care Plan**  
*for:*  
**Maria Johnson**

Discharge Date: October 25, 2005

 Problem with anything in this packet?  
Call Mary Goodwin: (617) 414-6210

Serious health problem?  
Call your Doctor, Chris Manasseh: (617) 825-3400



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**EACH DAY** follow this schedule:  
Medication Schedule for Maria Johnson



| What time of day do I take this medicine?  | Picture (the medication from the pharmacy may not look exactly like this)           | Medication name<br>Amount<br># of pills           | How do I take this medicine? | Why am I taking this medication? |
|--|---|---|------------------------------|----------------------------------|
| <br>Morning |  | Motrin® (Ibuprofen)<br>800mg <b>1 pill</b>        | by mouth with food           | pain                             |
|  |  | Zestril® (Lisinopril)<br>10mg <b>1 pill</b>       | by mouth                     | blood pressure                   |
|  |  | Apresazide® (HCTZ)<br>25mg <b>1 pill</b>          | by mouth                     | blood pressure                   |
|  |  | Nifedical XL® (Nifedipine)<br>30 mg <b>1 pill</b> | by mouth                     | blood pressure                   |
|  |  | Protonix® (Pantoprazole)<br>40 mg <b>1 pill</b>   | by mouth                     | indigestion                      |

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**October 2005**  
\*\*\*Bring this Plan to each Appointment\*\*\*

| Sunday    | Monday  | Tuesday                    | Wednesday | Thursday  | Friday    | Saturday  |
|-----------|---|----------------------------|-----------|---|-----------|-----------|
|           |   |                            |           |   |           | <b>1</b>  |
| <b>2</b>  | <b>3</b>  | <b>4</b>                   | <b>5</b>  | <b>6</b>  | <b>7</b>  | <b>8</b>  |
| <b>9</b>  | <b>10</b>   | <b>11</b>                  | <b>12</b> | <b>13</b>   | <b>14</b> | <b>15</b> |
| <b>16</b> | <b>17</b>   | <b>18</b>                  | <b>19</b> | <b>20</b>   | <b>21</b> | <b>22</b> |
| <b>23</b> | <b>24</b>   | <b>25</b><br>Left hospital | <b>26</b> | <b>27</b><br>Pharmacist will call today or tomorrow | <b>28</b> | <b>29</b> |
| <b>30</b> | <b>31</b><br>Dr. Manasseh at 1:30 at Harvard St. John will drive. |                            |           |   |           |           |

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**November 2005**  
\*\*\*Bring this Plan to each Appointment\*\*\*

| Sunday    | Monday    | Tuesday   | Wednesday  | Thursday                                     | Friday  | Saturday  |
|-----------|-----------|---|--|--|---|-----------|
|           |           | <b>1</b>  | <b>2</b>   | <b>3</b>                                     | <b>4</b><br>Call cab at 9:15am<br>Dr. Bernard at 10:00am at BMC | <b>5</b>  |
| <b>6</b>  | <b>7</b>  | <b>8</b><br>Cardiac Stress Test at 11:00 am at BMC<br>John will drive | <b>9</b><br>Nutritionist at 9:30am at BMC<br>Take #1 bus | <b>10</b>                                    | <b>11</b>   | <b>12</b> |
| <b>13</b> | <b>14</b> | <b>15</b>   | <b>16</b>  | <b>17</b>                                    | <b>18</b>   | <b>19</b> |
| <b>20</b> | <b>21</b> | <b>22</b>   | <b>23</b>  | <b>24</b><br>BMC will call at 10am for study | <b>25</b>   | <b>26</b> |
| <b>27</b> | <b>28</b> | <b>29</b>   | <b>30</b>  |  |   |           |

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Medical Problem:  
**Angina**  
Angina is a feeling of tightness, squeezing, or pain in the chest.

- Take your medications as prescribed.
- Take walks, get exercise.
- Keep weight within healthy range.
- Eat healthy, follow a nutrition plan.
- Carry your medicine with you.
- See your doctor and ask questions.

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Measures

1. 30d readmissions
2. 30d ED visits
3. Compliance with follow-up visits and studies
4. Adverse events
5. SF-12 (Health related QOL)

Future Directions

1. Assessing which components of the RED process “mattered” most
2. Automating more of the discharge process, including patient education

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Lessons Learned

- Doing a “good discharge” is HARD!!!
- Ownership of the process MUST be established
- Measurement of the process and outcomes is CRITICAL
- Raising the appreciation of the importance of a “good discharge” amongst inpatient care givers is IMPERITIVE
- Oh yeah... and doing a “good discharge” is HARD!!!

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Thank You

For further information:  
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617-414-4373

- The Project RED Team**
- David Anthony, MD, MSc
  - Gail Burniske, PharmD
  - Kevin Casey, MPH
  - John Chessare, MD
  - VK Chetty, PhD
  - Mary Chin, MSW
  - Maureen Colton, RN
  - Allyson Correia, RN
  - Larry Cutpepper, MD, MPH
  - Jeffrey Greenwald, MD
  - Brian Jack, MD – Principal Investigator
  - Anna Johnson
  - Anand Kartha, MD
  - Christopher Manasseh, MD
  - Diana Marsh
  - Denise Kathleen McKenna
  - Denise Mehegan
  - Michael Paasche-Orlow, MD, MPH
  - Maria Rizzo DePaoli, MSW
  - Amy Rosen, PhD
  - Nancy Torres-Finnerty, MD
  - Cornelia Walsh, RN

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## Innovations in the Discharge Transition

Lakshmi K. Halasyamani, MD  
Eric Howell, MD  
Adrienne Green, MD  
Jeffrey Greenwald, MD

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## Session Overview

- The discharge transition – a snapshot of the literature
- The role of the hospitalist
- SHM and the discharge transition
- Innovations in discharge
  - Eric Howell: A multi-center study to improve medication safety
  - Adrienne Green: Multidisciplinary strategies to address complex discharges
  - Jeffrey Greenwald: Using a discharge advocate to improve the discharge transition

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## Risks of the Discharge Transition

- Common: Up to twenty percent of hospitalized patients experience an adverse event in the hospital to home transition (Forster et al, Ann Intern Med, 2003)
- Clinician Communication
  - Post-hospital providers unaware of pending test results (Roy et al, Ann Intern Med, 2005)
  - Availability of the discharge summary at the time of follow-up (van Walraven, JGIM, 2002)

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### Risks of the Discharge Transition

- Patient understanding of discharge instructions and transitional care goals
  - Patient-level barriers
  - Health-system level barriers
- Medication safety
  - Medication reconciliation (<http://www.icsaho.org>, 2006)
  - Adverse events due to medications (Kucukarslan, Ach Int Med, 2003)

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### Role of the Hospitalist

- Team member
- Team leader
- Champion of care coordination

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### SHM and the Discharge Transition

- HQPS task force
- Development of discharge checklist
- Feedback at 2005 annual meeting
- Revision of checklist
- Dissemination of checklist
- Hartford/SHM demonstration project

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