Care Transitions: From Silos to Bridges
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San Francisco General Hospital
University of California, San Francisco
Why do readmissions occur?

- Communication gaps
- System pressures
- Patient Risk Factors

Readmissions
THE SF HEALTH NETWORK (SFHN) EXPERIENCE

SFHN: Integrated clinical enterprise of the SF Dept of Public Health
San Francisco General Hospital
• Only public safety net hospital, trauma center in San Francisco
• Teaching hospital
• Diverse, young, & underinsured patient population

<table>
<thead>
<tr>
<th>SFGH Patient Characteristics</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marginally housed or homeless</td>
<td>8-10%</td>
</tr>
<tr>
<td>Uninsured</td>
<td>30%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>40%</td>
</tr>
<tr>
<td>Medicare</td>
<td>20%</td>
</tr>
</tbody>
</table>
CHALLENGES

2012 Unmet Operational Goals:

- Provide patients with tools to stay out of hospital
- Bridge silos across Network
- Provide a centralized access point of information
- Standardize and improve processes of care
- Reduce readmissions by 15 percent
SUPPORT FROM HOSPITAL TO HOME (SHHE) TRIAL

• Randomized trial of usual care vs RN-based self-management education with follow-up coaching phone calls.
  » Built on best practices of RED and Coleman models

• 699 patients age >55, linguistically and ethnically diverse, discharged to community.

• No difference in readmission or ED visits, with trend towards increase in ED visits.

• Conclusion: Cannot assume successful interventions studied in other populations will be effective in the safety net.

EARLY IMPROVEMENT WORK

SFGH Care Transitions Taskforce

• Established Fall 2012
  » Grassroots group from across SFHN with interest in care transitions
  » Initial goal: Bring all relevant stakeholders to the table to develop mission, charter, and deliverables

*it takes a village* to improve the quality & safety of care transitions
<table>
<thead>
<tr>
<th>Considerations and components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shared mission</strong></td>
<td>Goal and aim statement</td>
</tr>
<tr>
<td><strong>Stakeholders</strong></td>
<td>Cross-continuum Interdisciplinary</td>
</tr>
<tr>
<td><strong>Schedule</strong></td>
<td>Established with group input</td>
</tr>
<tr>
<td><strong>Statistics</strong></td>
<td>At least one target metric</td>
</tr>
<tr>
<td><strong>Sponsorship</strong></td>
<td>Required at executive level</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td>Dedicated point person/organizer</td>
</tr>
</tbody>
</table>
# SFGH Care Transitions Taskforce

<table>
<thead>
<tr>
<th><strong>Shared mission</strong></th>
<th>Reduce readmissions at SFGH by 15% and improve processes or care.</th>
</tr>
</thead>
</table>
| **Stakeholders**   | • Inpatient: MD, RN, Rx, PT, SW  
                     • Outpatient: MD, RN, Rx, CM |
| **Schedule**       | • Biweekly meetings  
                     • Working group meetings |
| **Statistics**     | • 30 day readmission rate  
                     • 7 day post discharge follow-up |
| **Sponsorship**    | Past chief of staff |
| **Staff**          | Care transitions analyst and two physician coordinators |
CARE TRANSITIONS TASKFORCE: FIRST STEPS

• Initial Taskforce goals:
  » Conduct inventory of transitions initiatives across Health Network
  » Do gap analysis/needs assessment
  » Gather data
  » Strategize around initiating improvement work
INVENTORY?

Post-discharge Bridge Clinic

Medical Respite & Sobering Center

ED High User Case Management Program

Complex Care Management Teams

Primary Care

SNF & Rehab Care
SFGH Care Transitions Taskforce

• Initial goals:
  » Conduct inventory transitions initiatives across SFHN
  » Do gap analysis/needs assessment
  » Gather data
  » Strategize around initiating improvement work
GAP ANALYSIS: COMMUNICATION
GAP ANALYSIS: COORDINATION & TARGETED INTERVENTION

• Lack of timely follow-up post-discharge

• No definition of/approach to high-risk patients

• No process for deploying right intervention to right patient

• No data to support the work
CARE TRANSITIONS TASKFORCE: FIRST STEPS

SFGH Care Transitions Taskforce

• Initial goals:
  » Conduct inventory of transitions initiatives across SFHN
  » Do gap analysis/needs assessment
  » Gather data
  » Strategize around initiating improvement work
DATA & DASHBOARDS

• >60 siloed databases
• Iterative process to find relevant process and outcome measures

“Data isn’t like your kids, you don’t have to pretend to love them equally.”
Amanda Cox, NY Times
SFGH 30-DAY ALL-CAUSE READMISSION RATE

Goal: 10.6%

Source: UHC
**DASHBOARD: READMISSION VARIABLES**

- Service and unit
- DRG
- Homeless
- Mental health/substance use dx
- Zip code
- Patients who leave AMA

### Index DRG

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>2013-1</th>
<th>2013-2</th>
<th>2013-3</th>
<th>Avg</th>
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<td>22%</td>
<td>20%</td>
<td>39%</td>
<td>27%</td>
</tr>
<tr>
<td>PNEUMONIA ORGANISM NOS</td>
<td>15%</td>
<td>14%</td>
<td>17%</td>
<td>15%</td>
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<td>ABDOMINAL PAIN-SITE NOS</td>
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<td>24%</td>
<td>20%</td>
<td>18%</td>
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<tr>
<td>ALCOHOL WITHDRAWAL</td>
<td>15%</td>
<td>21%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>SHORTNESS OF BREATH</td>
<td>17%</td>
<td>13%</td>
<td>21%</td>
<td>17%</td>
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**Location**

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<th>Count</th>
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<td>2. Mission</td>
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<td>3. SOMA</td>
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<tr>
<td>4. Civic Center/Hayes Valley</td>
<td>94102</td>
<td>171</td>
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<td>5. Balboa Park/Excelsior</td>
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<td>166</td>
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<tr>
<td>6. Visitacion Valley</td>
<td>94134</td>
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<td>8. Potero Hill/ Dogpatch/ Mission Bay</td>
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<td>51</td>
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<td>9. Sunset District</td>
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* Determined using Google Maps
DASHBOARD: PRIMARY CARE PROCESS MEASURES

**Proportion of Patients Attending PCP F/U Appt Within 7 Days**

Definition: \# patients discharged from SFGH who attend any PCP, RN, or pharmacy appointment at PCH within 7 days/\# patients discharged from SFGH who have CHN/COPC providers; excludes patients with providers outside of CHN/COPC and patients unassigned to PCP. Stratified by clinic.

**Proportion of Patients Attending Any F/U Appt Within 7 Days**

Definition: \# patients discharged from SFGH who attend any appointment (primary care or specialty) within 7 days/\# patients discharged from SFGH; excludes patients with providers outside of CHN/COPC and W82 Urgent Care. Includes patients without PCP. Stratified by clinic.
DASHBOARD: PROMPTING IMPROVEMENT WORK

• Our data showed us:
  » Timely outpatient follow-up inadequate
  » Few patients going to SNFs, SNF readmissions low
  » CHF readmissions = pain point

• Our data prompted action plan:
  » Partnering with primary care leadership
  » Disseminating data to outpatient stakeholders
  » Pilots of new care transitions initiatives
  » Scaling up successful pilots
“You make a good point; we both hate the cat. I’m just not sure what it is you’d bring to a partnership.”

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PARTNERING WITH PRIMARY CARE: KEY CONCEPTS

• Essential to have primary care representatives as part of the core group of a hospital-based care transitions taskforce.

• Hospital-based care transitions efforts must have buy-in of primary care leadership.

There are 12 SF Health Network primary care clinics for adults.
PARTNERING WITH PRIMARY CARE: EXAMPLE OF EARLY PILOT

• California Quality Collaborative Pilot:
  » Three primary care sites
  » Two different approaches
    1. Resource intensive, team-based approach, high touch, limited target population
    2. Resource limited, lower touch, broader reach

• Both pilots increased scheduled and attended follow-up

• 2nd pilot expanded to other clinics
LEARNINGS FROM PRIMARY CARE PILOTS: DISCHARGE DATABASE

• Clinics needed timely information about discharged patients.

• SFGH Discharge Database:
  » Integrated into EHR, updated daily
  » Accessible to inpatient and outpatient staff & providers
  » Sortable & customizable
  » Integrated into work flow -&gt; ideally reduces work

• Initially piloted at two SFHN clinics – now implemented across network.
## DISCHARGE DATABASE

### Screen Shot

### Table

<table>
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<tr>
<th>MRN</th>
<th>Pt Id</th>
<th>DOB</th>
<th>Vst Start Time</th>
<th>Vst End Time</th>
<th>Pt Name</th>
<th>PCP</th>
<th>Race</th>
<th>Race Cd Name</th>
<th>Gender</th>
<th>Last Disch Order</th>
<th>Last Disch Order Entry Time</th>
<th>Disch Day</th>
<th>Disch Disp Desc</th>
<th>Tot Len Of Stay</th>
<th>Hosp Src</th>
<th>Prev Cd</th>
<th>Nurse St Loc</th>
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<td>12/20/2014 11:00 AM</td>
<td>12/20/2015 12:00 AM</td>
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<td>20</td>
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<td>FSR</td>
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<tr>
<td></td>
<td></td>
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<td>1/22/2015 11:00 AM</td>
<td>1/25/2015 11:00 AM</td>
<td>FAMILY HEALTH CENTER</td>
<td>ORDOÑEZ, ISIDOR</td>
<td>OTHER RACE</td>
<td>F</td>
<td>SPA</td>
<td>AHR</td>
<td>Routine discharge</td>
<td>1 OB</td>
<td>6C</td>
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<td>CAROL</td>
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<td>2 OB</td>
<td>6C</td>
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<td>ENGS</td>
<td>AHR</td>
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<td>2 NUR</td>
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</table>
PARTNERING WITH PRIMARY CARE: POST-DISCHARGE ACCESS

SFHN Scheduled & Attended Follow-Up within 7 Days Post Discharge

<table>
<thead>
<tr>
<th>Year</th>
<th>% Attended Follow-Up</th>
<th>% Scheduled Follow-Up</th>
<th># Attended Follow-Up</th>
<th># Scheduled Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-3</td>
<td>47%</td>
<td>34%</td>
<td>479</td>
<td>479</td>
</tr>
<tr>
<td>2013-4</td>
<td>46%</td>
<td>35%</td>
<td>474</td>
<td>474</td>
</tr>
<tr>
<td>2014-1</td>
<td>50%</td>
<td>38%</td>
<td>631</td>
<td>631</td>
</tr>
<tr>
<td>2014-2</td>
<td>57%</td>
<td>42%</td>
<td>640</td>
<td>640</td>
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</tbody>
</table>
PARTNERING WITH PRIMARY CARE
POST-DISCHARGE ACCESS

30-Day All-Cause Readm Rate among SFHN Pts Attending Follow-Up within 7 Days

<table>
<thead>
<tr>
<th>Year</th>
<th>Median Rate</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-4</td>
<td>5%</td>
<td>0-8%</td>
</tr>
<tr>
<td>2014-1</td>
<td>4%</td>
<td>0-8%</td>
</tr>
<tr>
<td>2014-2</td>
<td>6%</td>
<td>0-11%</td>
</tr>
</tbody>
</table>
INPATIENT WORK

• Communication & Coordination:
  » Email prompt built into EHR
  » Discharge summary and patient discharge plan built-in to EHR
  » Post-discharge follow-up scheduled prior to discharge
  » Warm line established

• Agreed-upon definition of high risk patients

Care Transitions Taskforce members brainstorm barriers to successful transitions within the SF Health Network.
INTERVENTIONS FOR HIGH RISK PATIENTS

• Standardized approach to deployment of interventions for high risk patients
  » SFGH Transitional Care Nursing Program
  » CHF Transitions Pharmacist
  » SF Community Care Transitions Program

Richard Santana RN & bedside nurse check on a patient enrolled in the SFGH Transitional Care Nursing program.
### Translational Care Nursing: Medication Instructions

**5th to 8th grade reading level**

- Uses Universal Medication Scheduling language & pictograms

---

<table>
<thead>
<tr>
<th>Every Day: Medicine you need to use every day.</th>
<th>Morning</th>
<th>Noon</th>
<th>Evening</th>
<th>Bedtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amlodipine 10 MG Oral Tablet</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benazepril HCI Tablet 10 mg</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Doxycycline 100mg</td>
<td>1</td>
<td>1</td>
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<td></td>
</tr>
<tr>
<td>Qvar Inhaler 80 mcg/inh</td>
<td>2 puffs</td>
<td>2 puffs</td>
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<tr>
<td>Atorvastatin 40 MG Oral Tablet</td>
<td>1</td>
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</tr>
</tbody>
</table>

**Can be translated into 18 different languages**
TRANSITIONAL CARE NURSING: READMISSION RATES

TCN 30-Day Readmission Rate

Dec-13  Jan-14  Feb-14  Mar-14  Apr-14  May-14  Jun-14  Jul-14  Aug-14  Sept-14  Oct-14  Nov-14  Dec-14  Jan-15
4% 9% 19% 13% 10% 15% 9% 13% 21% 10% 17% 24% 13% 6%

Readm Rate  2013 SFGH Average  TCN Average
SFGH 30-DAY ALL-CAUSE READMISSION RATE

Goal: 10.6%

Percentage

0 2 4 6 8 10 12 14

Q1-13 Q2-13 Q3-13 Q4-13 Q1-14 Q2-14 Q3-14 Q4-14

11.6 11.8 12.2 11.3 11.8 12.9 13.1 12.8

Readm Rate Goal

Source: UHC
NEW DIRECTIONS
## Readmission Analysis: New Learnings

<table>
<thead>
<tr>
<th>Analysis of Readmissions</th>
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</thead>
<tbody>
<tr>
<td><strong>Payer source</strong></td>
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<tr>
<td><strong>Behavioral health burden</strong></td>
</tr>
<tr>
<td><strong>High users</strong></td>
</tr>
<tr>
<td><strong>Timing of readmission</strong></td>
</tr>
<tr>
<td><strong>Diagnoses</strong></td>
</tr>
</tbody>
</table>
### Patient Interview Findings

1. **Housing, transportation, money:** “I have trouble with transportation and money. I don't want to use money to take public transportation to go to see doctors often.”

2. **Medication-related issues:** "If I had enough medication, I wouldn’t be here.“

3. **Better access to intensive services:** “Respite is good...but I probably need more.”

4. **Discharged too early:** "Maybe if the hospital could keep me a little longer for observation."

5. **Substance use & environmental factors:** “[My] lifestyle is the same once I leave the hospital...the habit grabs me back...smoking and drinking.”

6. **Nutrition:** “I have diabetes and high blood pressure...I try to follow my diets but it still didn't help me stay out of the hospital.”

### Provider Quotes

1. “The pt has an IHSS worker for 4 hours/day who does an excellent job of overseeing her medications and care...when the IHSS worker is not there, the pt does not use her COPD medications or ambulate as we have recommended...could be helpful to increase the daily hours for the IHSS worker.”

2. “This patient needs long term housing of a kind that's minimally available in SF. She would be a good candidate for intensive case management or for HUH housing.”

3. “The patient wasn't ready to be discharged...the patient was organized and literate...but wasn't back to baseline when she was sent home, so at her timely follow-up appointment, we sent her to the ED and she was readmitted.”

Source: HOMERUN
NEXT STEPS

• Deeper dive into Medi-Cal population
• Partnering with managed Medi-Cal programs
• Examining frequent users and their impact
• Partnering with behavioral health and case management
• Ongoing innovations and improvements
  » Creating robust outpatient CHF program
  » Expanding role of pharmacists across the Network
  » Improving tools for LEP and LHL patients
  » Bringing the patients’ voice to the taskforce
KEY LESSONS

• A cross-continuum, multidisciplinary team is an important part of care transitions improvement work - it takes a village!

• Hospitals benefit from partnering with primary care; engaging primary care leadership should be a key strategy in care transitions improvement work.

• Other key strategies include identifying high risk patients & deploying right intervention to right patient at right time