Innovations in Ambulatory Care and Care Coordination
Reducing Hospital Readmissions

Patricia Belair, BSN, MA
Senior VP, Ambulatory Care

Jitendra Barmecha, MD, MPH, FACP
Chief Medical Informatics Officer
Medical Director, Care Transitions

May 12, 2011
St. Barnabas Hospital

• 461-bed community hospital and Level I Trauma Center
• 199-bed, St. Barnabas Rehabilitation and Continuing Care Center
• Fordham-Tremont Community Mental Health Center, a comprehensive outpatient facility that receives 160,000 visits per year.

• ED visits: 100,700
• Hospital discharges: 23,000
• Ambulatory surgeries: 8,400
• Dialysis treatments: 33,200
• Ambulatory care visits: 175,000
Hospital Readmissions - Scope of the Problem

- 17.6 percent of all Medicare hospital admissions are readmissions
- Accounts for $15 billion annually
- Of the $15 billion in readmission costs, it was found that $12 billion were potentially preventable
- CHF 30-day readmission rates are particularly high at approximately 20 to 24 percent

A Medicare Payment Advisory Commission (MedPAC) Medicare data analysis
Hospital Readmissions - Scope of the Problem

- 33 percent (1/3rd) readmit within 90 days.

- Readmissions have a 0.6 day longer LOS than other patients in the same DRG.

- Medical causes dominate readmissions.

“Although the rehospitalization rate is often presented as a measure of the performance of hospitals, it may also be a useful indicator of the performance of our health care system.”
Identification of Readmissions Data

• Real Time Data Capture
  – Registration - HBO
  – Allscripts

• Retrospective Data
  – External and Internal data
Readmissions Dashboard at SBH - 2010

- Total Discharges – 21,151
- Total Discharges – 15,554 (excluding Hospice/Psych/Detox)
- Readmission within 30 days – 1,836
  Readmission within 30 days/discharges
  - Medicine – 1,603/10,430
  - Surgery – 105/1,515
  - Peds – 48/997
  - Ob/Gyn – 80/1,620
Healthfirst Medicare Members
Readmissions Dashboard at SBH

• 2008 : 26.0%

• 2009 : 25.4%

• 2010 : 19.7%
SBH Initiatives

- Care Transitions – concept/culture
- Use of HIT – Allscripts
- ED initiative – readmit note
- Readmit Analysis – modified IHI tool
- Re-engineering discharge process/ Six Sigma Project
- Healthfirst – Onsite Care Management
- Physician’s Report Card
- H2H (Hospital to Home: ACC/IHI)
- Bronx Collaborative
- Transition Care Clinic / Level 2 PCMH
Re-Engineering Discharge Process

• Documentation by Senior House staff/PA
  – Prescription writing
• Revision of Discharge forms
• White Board Rounds
• Appointments on wards by Unit Clerks
• Post discharge phone call*
• Site Map (along with discharge documents)

*in the process
Healthfirst Case Management (onsite)

• Care Transitions for Medicare Members

• Senior Health Center
Healthfirst Case Management (onsite)

Discharge Planning / Care Transitions

• Introduction while hospitalized
• Coordinates discharge planning with patient and family
• Contacts post discharge
  – Clinical appointment
  – Medications
  – Teaching
  – Community referrals
St. Barnabas Senior Health Center

Geriatric Center

• Nurse Coordinator
• Assessments
• Clinical Referrals
• Community Referrals
• Tracking and Follow up
St. Barnabas Senior Health Center
Membership with ED Visits and Admission Data
Bronx Collaborative

- Members – SBH, Bx Leb, Montefiore, Healthfirst, Emblem Health
- Unique partnership between provider and payors
- Grant from NYS Health Foundation
- Care Management Model
- Goals
- Outcome
The H2H initiative focuses on developing a “learning community” centered around three core questions that will be tied to tactics and best practices for implementation.

The questions are:

• Is the patient familiar and competent with his or her medication, and does she or he have access to it?
• Does the patient have a follow-up visit scheduled within a week of discharge, and is he or she able to get there?
• Does the patient fully comprehend signs and symptoms that require medical attention, and know who to contact if they occur?
<table>
<thead>
<tr>
<th>Physician Name</th>
<th>Physician NYS LicNo</th>
<th>Discharge</th>
<th>Avg LOS</th>
<th>Avg Cost</th>
<th>Re-AdmRate</th>
<th>Mortality Rate</th>
<th>Specialty/Dept</th>
</tr>
</thead>
<tbody>
<tr>
<td>YUVIENCO, MARIA ZOBEL</td>
<td>195267</td>
<td>434</td>
<td>3.02348</td>
<td>5068.742</td>
<td>28</td>
<td>0.547601567</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>MUTHYALA, PADMUN K</td>
<td>246242</td>
<td>903</td>
<td>4.05904</td>
<td>9786.615</td>
<td>160</td>
<td>1.076587486</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>BULKAN, SARAH</td>
<td>230276</td>
<td>853</td>
<td>3.36631</td>
<td>8051.903</td>
<td>53</td>
<td>1.038185729</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>MENKEL, ROBERT</td>
<td>149375</td>
<td>931</td>
<td>4.83097</td>
<td>10304.269</td>
<td>125</td>
<td>1.138747905</td>
<td>Critical Care</td>
</tr>
<tr>
<td>REY, RICARDO</td>
<td>243044</td>
<td>799</td>
<td>4.34868</td>
<td>9537.270</td>
<td>113</td>
<td>1.1270801</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>AHMED, ABDURRISHAN</td>
<td>171139</td>
<td>656</td>
<td>4.70686</td>
<td>10407.2087</td>
<td>106</td>
<td>1.233581878</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>KULSHRETH, HA MANISHA</td>
<td>001566</td>
<td>642</td>
<td>4.15887</td>
<td>9141.6425</td>
<td>95</td>
<td>1.086399533</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>GRANTHAM, CHRISTOPHER</td>
<td>170931</td>
<td>718</td>
<td>4.98607</td>
<td>11239.574</td>
<td>94</td>
<td>1.25267507</td>
<td>Critical Care</td>
</tr>
<tr>
<td>RERROA, MANUEL</td>
<td>500247</td>
<td>494</td>
<td>4.78947</td>
<td>10200.6107</td>
<td>75</td>
<td>1.07641093</td>
<td>Neurology</td>
</tr>
<tr>
<td>PATEL, BHAVESH</td>
<td>242254</td>
<td>430</td>
<td>6.54883</td>
<td>9875.61407</td>
<td>74</td>
<td>1.29763023</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>BENDICH, GALINA</td>
<td>207044</td>
<td>327</td>
<td>6.28746</td>
<td>13439.745</td>
<td>73</td>
<td>1.24419052</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>CROLL, JAMES</td>
<td>129953</td>
<td>292</td>
<td>6.24657</td>
<td>14637.024</td>
<td>71</td>
<td>1.65863574</td>
<td>Neurology</td>
</tr>
<tr>
<td>ERLIKH, TAMARA</td>
<td>225773</td>
<td>350</td>
<td>5.30857</td>
<td>11255.3913</td>
<td>63</td>
<td>1.23626571</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>BARMECHA, JITENDRA</td>
<td>001267</td>
<td>303</td>
<td>4.30836</td>
<td>9714.84972</td>
<td>40</td>
<td>1.256013861</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>SMINIA, MIHAIZ</td>
<td>001635</td>
<td>91</td>
<td>9.81318</td>
<td>28177.9873</td>
<td>33</td>
<td>3.65959341</td>
<td>Pulmonary Diseases</td>
</tr>
<tr>
<td>EPSTEIN, CAROL A</td>
<td>161190</td>
<td>126</td>
<td>5.15079</td>
<td>11260.5474</td>
<td>32</td>
<td>1.444962698</td>
<td>Infectious Diseases</td>
</tr>
<tr>
<td>DELANEY, BRIAN</td>
<td>158566</td>
<td>299</td>
<td>6.75919</td>
<td>13446.9999</td>
<td>30</td>
<td>1.25212074</td>
<td>Family Practice</td>
</tr>
<tr>
<td>STUMACHER, RICHARD L</td>
<td>207779</td>
<td>265</td>
<td>3.55471</td>
<td>8753.86232</td>
<td>29</td>
<td>1.24073283</td>
<td>Pulmonary Diseases</td>
</tr>
<tr>
<td>CANE, MARILYN</td>
<td>159932</td>
<td>245</td>
<td>13.232653</td>
<td>20671.304</td>
<td>24</td>
<td>0.001699104</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>AMILO, GEORGE</td>
<td>163361</td>
<td>192</td>
<td>19.68229</td>
<td>27442.9915</td>
<td>23</td>
<td>0.874627083</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>PETERSON, CHRISTINE</td>
<td>236799</td>
<td>220</td>
<td>7.97277</td>
<td>12540.9453</td>
<td>23</td>
<td>1.242726941</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>ADLER, DARFYLL L</td>
<td>208442</td>
<td>220</td>
<td>2.55454</td>
<td>8059.30585</td>
<td>28</td>
<td>1.213639545</td>
<td>Critical Care</td>
</tr>
<tr>
<td>PIMENTEL, EDGAR</td>
<td>203059</td>
<td>96</td>
<td>7.3437</td>
<td>18285.3699</td>
<td>22</td>
<td>2.163563028</td>
<td>Family Practice</td>
</tr>
<tr>
<td>TANGIAN</td>
<td>210006</td>
<td>109</td>
<td>5.26568</td>
<td>13415.9565</td>
<td>21</td>
<td>4.181472774</td>
<td></td>
</tr>
<tr>
<td>AMENDOLA, PAULA</td>
<td>208944</td>
<td>81</td>
<td>3.54320988</td>
<td>7402.49683</td>
<td>20</td>
<td>0.950260247</td>
<td>Family Practice</td>
</tr>
<tr>
<td>OKPALANMA, CHIKA</td>
<td>187281</td>
<td>183</td>
<td>14.97814</td>
<td>19875.1105</td>
<td>19</td>
<td>0.88504754</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>BELLARDI, CHRISTIAN</td>
<td>250412</td>
<td>104</td>
<td>5.19230709</td>
<td>10528.4842</td>
<td>18</td>
<td>0.122866356</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>IHEMAGUDE, MICHAEL</td>
<td>207150</td>
<td>232</td>
<td>8.6971</td>
<td>6169.71007</td>
<td>17</td>
<td>0.670266234</td>
<td>Obstetrics &amp; Gynecology/</td>
</tr>
<tr>
<td>DAVIS, ROBERT</td>
<td>175401</td>
<td>209</td>
<td>5.11100</td>
<td>15447.6431</td>
<td>16</td>
<td>1.79517103</td>
<td>Surgery, General</td>
</tr>
<tr>
<td>McLEAN, RONALD H</td>
<td>216645</td>
<td>150</td>
<td>13.83333333</td>
<td>34174.5989</td>
<td>16</td>
<td>2.19139073</td>
<td>Surgery, General</td>
</tr>
<tr>
<td>CRONEN, ARTHUR C</td>
<td>112754</td>
<td>174</td>
<td>19</td>
<td>24955.2397</td>
<td>15</td>
<td>0.840964943</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>ENG, NELSON</td>
<td>185345</td>
<td>60</td>
<td>8.585</td>
<td>12838.4007</td>
<td>15</td>
<td>1.178335</td>
<td>Family Practice</td>
</tr>
<tr>
<td>MAX, GREGORY</td>
<td>156672</td>
<td>170</td>
<td>16.6294113</td>
<td>21774.5333</td>
<td>15</td>
<td>0.901962353</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>MACCIARAVELLO, GUIDO</td>
<td>003704</td>
<td>102</td>
<td>4.0582353</td>
<td>8574.16765</td>
<td>13</td>
<td>1.020155882</td>
<td>Psychiatry</td>
</tr>
<tr>
<td>VERNENIKAR, VITHAL V</td>
<td>223396</td>
<td>167</td>
<td>6.11377</td>
<td>17490.3062</td>
<td>12</td>
<td>2.263593413</td>
<td>Surgery, Vascular</td>
</tr>
<tr>
<td>BERMUDEZ, ARAMIS</td>
<td>207184</td>
<td>42</td>
<td>6.585239</td>
<td>14010.35303</td>
<td>11</td>
<td>1.608014236</td>
<td>Family Practice</td>
</tr>
<tr>
<td>DIFAZIO, LOUIS</td>
<td>151941</td>
<td>74</td>
<td>6.43243</td>
<td>14592.5622</td>
<td>11</td>
<td>1.252125876</td>
<td>Internal Medicine</td>
</tr>
<tr>
<td>BANUKANIZ</td>
<td>242051</td>
<td>73</td>
<td>6.39726027</td>
<td>14186.8988</td>
<td>10</td>
<td>1.69790411</td>
<td></td>
</tr>
</tbody>
</table>
Transition Care Clinic

- Once a week / walk-in clinic
- Supported by Care Transitions Team/Internist
- Initially – all Healthfirst discharges and now anyone with complex medical needs/follow-up
- Goals – having post – discharge follow-up within 7 days

Challenges
- Appointments, Provider / Patient Education, Payor
Future Goals

- EHR implementation – Continuum
- Level 3 PCMH
- Expansion of Senior Health Care Center - Physician Home Care Program
- Ambulatory Care Case Management expansion
Contact:

Patricia Belair, BSN, MA
pbelair@sbhny.org
Phone: 718 960 9454

Jitendra Barmecha, MD, MPH, FACP
jbarmecha@sbhny.org
781 960 9475