How to Use Remote Tele-Monitoring for Post Cardiac Surgery Patients

Charles McDonough MBA, CPHQ
Director, Operations and Development
Wellspan VNA Home Care

Krista Kelly, BSN, RN
Senior Account Manager Southeast
Philips Telehealth Solutions

Session Objectives

- Discuss why telemonitoring is important for post-acute cardiac patients.
- Explain the resources required to develop a successful program.
- Demonstrate results of Wellspan VNA Home Care telemonitoring program.
**Hospitals (878 Beds)**
- York Hospital
- Gettysburg Hospital
- Ephrata Community Hospital
- Wellspan Surgery & Rehab Hospital

**Patient Care (93 Locations)**
- Primary Care & Rehab Services
- Diagnostic Imaging & Laboratory
- Retail Pharmacy & Walk-In Care

**Home Care (5 Counties)**
- 1600 + “Touched Lives” Daily
- Traditional Care Services
- Specialty Wound, IV Therapy, Palliative, & Therapy Services

**Costs**
- 1980 - $250 Billion
- 2010 - $2.6 Trillion

**Quality**
- Value vs. Volume
- Eliminating Waste

**Growing Population (age 65+)**
- 1980 – 25.6 million
- 2010 – 40.1 million
- 2030 – 70.2 million (est.)

**Patient Experience**
- Patient/Family Centered Care
- Patient/Family Involvement
- **Chronic Disease State Population.**
  - Chronic Disease Patients make up 75% of 65+ aging population

- **Chronic Disease State Costs**
  - 20% Medicare Patients but 80% Medicare expenditures

---

```
Chronic vs. Non-Chronic Population

- Chronic Disease State: 80%
- Non-Chronic Disease State: 20%

Chronic vs. Non-Chronic Expenditures

- Chronic Disease Expenditures: 20%
- Non-Chronic Disease Expenditures: 80%
```
- CMS Imposing penalty for 30 Day Re-Hospitalization
  - AMI (Acute Myocardial Infarction)*
  - Heart Failure*
  - Pneumonia

*68% Wellspan VNA Home Care telemonitored patients

- Patient Access
  - Quicker Access to patient care (24-48 hours of Inpatient Discharge)
  - Less dependence of physician availability

- Patient Safety
  - In Home Medication Reconciliation
  - Patient Education:
    - Medications
    - Safety/Falls Hazards

- Patient Experience
  - Often Happier in comfort of their own home.

- Reduced 30 Re-Hospitalization Rates
- **Store-It-Forward**
- **Remote Monitoring**
  - Tele-Health
- **Interactive**
  - Tele-Visits
- **Wellspan Call Button**
### Tele-Health in the Post-Acute Cardiac Patient.

- Identifies potential exacerbations before they become expensive emergency visits and possible inpatient admissions
- Vital Sign Gateway
- More efficient data
  - Leads to faster patient encounter.
  - Improves timeliness of interventions if necessary.
- Allows Patient Care practices to monitor patient remotely
  - Reduces costs
  - Improves an organization’s productivity with the ability to manage more with less.

### Improved Transition
- Hospital to Home

### Coordination of Care
- Dr. Visits
- Wellness & Coordination Calls

### Patient/Family Resource
- Education
- Link to community resources

### Medication management
- Link to early interventions
- **Home Health**
  - Decreased cost by $64 per visit ($2.8 million)

- **Hospital**
  - $20.56 million total savings

- **30 Day Re-Hospitalization**
  - Decreased 7% over 3 years

- **Overall Hospitalization**
  - Decreased 3% over 3 years

**Hospital Utilization**

<table>
<thead>
<tr>
<th></th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Day Re-Hospitalization</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>60 Day Hospitalization</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

- **Goals Achieved:**
  - Timeliness Initiation of Care (within 48 hours of inpatient discharge)
    - From 89% to 96%
  - More patients remaining in the community
  - Quality of Patient Care Increased
  - Cost of Patient Care Decreased
  - Now able to treat more patients at better efficiencies
“The group of VNA people helped me remain independent in my home without the fear of having to return to the hospital. Without them I could not have gotten back to my healthy self.”

“I originally did not want VNA to monitor me with all that stuff. However, after my 2nd visit to the hospital in 2 weeks I decided to give it a shot. It’s now been 6 months and no problems at all”
“I could not believe that my VNA nurse was able to see my doctor’s office visit in my home. She managed to remind me of my next appointment and verify if I picked up my new prescription. She was also able to set up a visit with my doctor’s office on her laptop to talk about the pain I was having in my chest...”

Charles McDonough, WellSpan VNA Home Care
- cmcdonough4@wellspan.org
- 717-812-5382

Krista Kelly, Phillips Telehealth Solutions
- Krista.Kelly@philips.com
- 417-569-2497