Bundled Payments for Care Improvement Initiative

Accelerated Development Learning Session # 3

Data-Driven Continuous Quality and Efficiency Improvement

Weslie Kary, Moderator
February 21, 2012
You Should Know

• Where to find the slides:
  http://cmmi.airprojects.org/BPCI.aspx

• The views expressed in these presentations are the views of each speaker and do not necessarily reflect the views or policies of the Centers for Medicare and Medicaid Services. The materials provided are intended for educational use and the information contained within has no bearing on participation in any CMS program.
Objectives for Accelerated Development Learning Sessions

• Support practitioners in their efforts to successfully implement bundled payment in support of the three-part aim.
• Share expert knowledge and lessons learned by early adopters.
• Set stage for continued collaborative learning during implementation.
Objectives for Care Design and Coordination Sessions

Today’s session second of two in domain of care design and coordination.

- **Data-Driven Continuous Quality and Efficiency Improvement**
- **Transform Care Today: Strategies and Tactics Across the Continuum (ADLS #2, February 14)**

Goal for both sessions is to support your efforts to achieve the three-part aim: better health, better care, and lower costs through improvement for all Americans.
Agenda

- **Presentation:** *Data Considerations for Sustained Engagement*, Sid Thornton, PhD
- **Q & A** for Dr. Thornton
- **Presentation:** *Episodes of Care: Measuring and Sharing Clinical Data*, Richard G. Popiel MD, MBA
- **Presentation:** *Improving Transitions and Reducing Avoidable Rehospitalizations*, Peg M. Bradke, RN, MA
- **Q&A** for Dr. Popiel and Ms. Bradke
Sid Thornton, PhD is a Senior Medical Informaticist with the Homer Warner Center for Informatics Research at Intermountain Healthcare in Salt Lake City, Utah. His responsibilities include interoperability among clinical and administrative systems including patient and provider registries and health information exchange. He serves as adjunct faculty to the University of Utah School of Medicine Department of Bioinformatics with research focus areas in perinatal information systems and activity-based encounter management. In 2002, he was awarded the Homer R. Warner Award from AMIA for his work in activity-based cost capture.
Richard G. Popiel, MD, MBA is President and COO of Horizon Healthcare Innovations, a company whose purpose is to launch new models of reimbursement and care delivery with network providers. He continues to serve as a member of the Board of Directors of Horizon Healthcare of New Jersey. Dr. Popiel has chaired both the National Council of Physician Pharmacy Executives at the Blue Cross Blue Shield Association and for the Chief Medical Officer Leadership Group at American Association of Healthplans (AHIP). He was also a member of AHIP’s Board of Directors.

Dr. Popiel earned his Bachelor of Science and Doctor of Medicine degrees from George Washington University and his Masters in Business Administration from Northwestern University Kellogg School of Management in Chicago. He is Board Certified in Internal Medicine.
**Peg M. Bradke, RN, MA**, is Director of Heart Care Services at St. Luke’s Hospital in Cedar Rapids, Iowa. She received her Bachelor’s Degree in Nursing from Mount Mercy College and her Master’s Degree in Nursing Administration from the University of Iowa College of Nursing. In her 25-year career, she has had various administrative roles in cardiac care. She currently coordinates the Heart and Vascular Service Line, including two intensive care units, two step-down telemetry units, the Cardiac Cath Lab, Electrophysiology Lab, Diagnostic Cardiology, Vascular and Interventional Lab, Respiratory Care, Cardiopulmonary Rehabilitation and the Heart Failure Clinic. Peg also serves as faculty with the Institute for Health Care Improvement (IHI) on the Transforming Care at the Bedside (TCAB) Initiative and STAAR (State Action on Avoidable Rehospitalizations Initiative).
Data considerations for sustained engagement

Sid Thornton, PhD
Intermountain Healthcare
Homer Warner Center for Informatics Research
February 21, 2012
Having a goal of engaging providers and encouraging sustainable change...

What should I ask of my data and information services?
Thoughtful data strategies can help engage participants

Quality care translates into cost effective care
Personalized performance metrics effect change
Data and information systems can facilitate multiple QI or decision support processes
Acknowledgments

Brent James, MD
Institute for Health Care Delivery Research

Peter Haug, MD
Homer Warner Center for Informatics Research

Stan Huff, MD
Intermountain Healthcare, Salt Lake City, UT
Where possible, rally around the common purpose of improved care delivery

- Financial measures alone can be divisive
- Compliance drivers can be seen as top heavy

*Can my care process models have both clinical, financial, and compliance variance views?*
What feedback can be available in real time at the point of service?

How can it be easier to do the right thing?

- Can I give providers comparative effectiveness and projected cost when ordering?
- Can providers see patient-specific variance details when making decisions?
- Can the patient’s current condition and progression be visible within modeled care process?
- Can the patient’s historical compliance inform the point of service decision?
Can accountability be effectively distributed across episodes?

*How does this specific encounter factor into the broader episodic goals?*

*Can my community establish baselines independent of organizational boundaries?*

*Can my community of providers agree to common benchmarks?*

*Can patient-provider relationships be resolved within episodes?*
How can I participate in the development of performance metrics?

For example, can I create different views based on adjustment criteria?

How are outliers fairly managed?

Can my progress by tracked well in advance of action points?

Does my review and appeal have any effect?
Exceptions happen. Do I have safe and realistic bypass mechanisms

For example, I can divert novel coding scenarios to in-line terminology workflows without corrupting or distorting existing concepts.

I can mark known excursions from processes for retrospective analysis without impacting my workflow.

I can document by exception.
Can I dive into the details comprising my variance?

Are my assisted computations transparent and indisputable?

For example, can I pinpoint the documented service or observation that rolls my patient into a higher acuity?

Can I see the detailed diagnostic codes of my comparison cases?

Can I forecast variance in an exploration sandbox?
Have I achieved balance between investment and empowerment?

For example, can I avoid alert fatigue?

Are my expectations realistic?

Can I expect meaningful critique and feedback?

Have I provided reasonable escape processes?
Thank you

Sid.thornton@imail.org
Episodes of Care Measuring and Sharing Clinical Data

Richard G. Popiel, M.D., M.B.A
President and Chief Operating Officer
Horizon Healthcare Innovations
Tuesday, February 21, 2012
HHI Mission / Achieving the Triple Aim

- **Horizon Healthcare Innovations** - Through collaboration, we are helping to create an effective, efficient and affordable health care system

- Subsidiary of Horizon Blue Cross Blue Shield of New Jersey

- Achieving the **Triple Aim**
Using Timely Data to Understand Patient Population & Take Action

- Patient visits provider; clinical data collected
- Provider shares relevant clinical data with HHI
- Analyze data from provider and other sources of possible patient utilization
- Review findings with care teams during collaborative work sessions
- Gains insight on individual patients and total population
- Allows providers to target patients/specific conditions

- Medical history
- Health outcomes
- Preventive screenings
- Complete snapshot of patient
- Understand health and cost

Sharing Data to Improve Quality, Lower Costs
How do we measure results?

Methodology

- Cross-sectional comparison between Horizon BCBSNJ members who were, and were not, attributed to PCMH practices

- Pre-post comparison in which pre-post changes over time among populations attributed to PCMH practices are compared with similar changes among populations who were not attributed to PCMH

- Compare actual results in the initiative against the budget for the intended population and time period

  - Statistical
  - Econometric
Statistical Measurement

- **Methodology Details**
  - We can evaluate our programs using a regression framework (which allows us to add regression controls, as needed)
  
  - We can also use a “difference-in-difference” framework. The coefficient on the interaction term gives us the difference-in-differences estimate of the effect
HHI Episode of Care Model Summary

**Initial episodic pilot:** Major joint replacements

- Partnering with orthopedic groups in New Jersey on Hip and Knee replacement episodes
- Created a Collaborative Clinical Advisory Panel (CAP)
- Phased-in reimbursement approach
- Collaboratively align on quality metrics, methods and data sharing/data validity with CAP and HCI3 (Prometheus)
- Grouper Technology
- Web-based tool to collect data
- Patient Experience Survey
Most Valuable, Most Unique Tools

Clinical Advisory Panel (CAP):
- Provided regular input into pilot design
- Variation of practices was evident
- Developed and agreed upon clinical metrics
- Encouraged idea sharing and development (e.g. same day knee replacements, complicated cases)

Web-Based Tool:
- Claims data alone is not sufficient
- Tool allows us to capture entire picture of episode
  - Data by segments (pre-surgery, surgery, and post-op)
- Since care is fragmented, tool can capture all encounters, increasing the likelihood of care coordination.
Clinical Data Reporting

Initial Data Capture Tool

Entering Clinical Data
Discharge Setting- 30 days Post Surgery/90 days Post Surgery
Decision to Operate- Pre-Operative Workup- Surgery

Overview of Web Tool Navigation
Preliminary Episodic Savings

Tracking Complete Episodes

Source: HHI Informatics
Monitoring EOC Clinical Data Captured

VTE Prophylaxis Rate by Surgery Type

VTE prophylaxis is a clinical measure that requires 100% compliance. The measure is captured during our clinical data collection process.

**Average Change in Functional Status Score**

1. Observed difference between pre-surgery and 90 days after surgery for both hip and knee are significant at p<0.0001.
2. Reduction in score indicates less pain and difficulty with activity and is desirable.
3. 80 Patients out of 279 have not reached 90 days post operation period.

**Quality Measures**

1. Claims for Surgeries with 30 Post-Op Days
2. 8 readmissions (4 Hip and 4 Knee) out of 9 are related to wound infections.

**Discharge Settings**

Source: HHI Informatics
# Actual Spend vs. Severity Adjusted Budget

## Historical Average by Stage Knee

<table>
<thead>
<tr>
<th>KNEE</th>
<th>Pre-Operation</th>
<th>Surgical Stay</th>
<th>Post 30 Days</th>
<th>Post 31-90 Days</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=XXX</td>
<td>$</td>
<td>$14,200</td>
<td>$3,000</td>
<td>$2,000</td>
<td>$19,500</td>
</tr>
<tr>
<td>Percentage (Hist Avg)</td>
<td>1.5%</td>
<td>72.8%</td>
<td>15.4%</td>
<td>10.3%</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Green: Under Historical Avg/Budget
- Red: Above Historical Avg/Budget

## Phase I Vs History Average (KNEE n=XX)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Pre-Operation</th>
<th>Surgical Stay</th>
<th>Post 30 Days</th>
<th>Post 31-90 Days</th>
<th>Total</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient A</td>
<td>$250</td>
<td>$19,000</td>
<td>$2,300</td>
<td>$800</td>
<td>$22,350</td>
<td>$23,000</td>
</tr>
<tr>
<td>% Episode Spend</td>
<td>1.1%</td>
<td>85.0%</td>
<td>10.3%</td>
<td>3.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>? Historical Avg %</td>
<td>-16.7%</td>
<td>33.8%</td>
<td>-23.3%</td>
<td>-60.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>? Historical Avg</td>
<td>$50</td>
<td>$(4,800)</td>
<td>$700</td>
<td>$1,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient B</td>
<td>$100</td>
<td>$13,500</td>
<td>$2,000</td>
<td>$1,000</td>
<td>$16,600</td>
<td>$22,500</td>
</tr>
<tr>
<td>% Episode Spend</td>
<td>0.6%</td>
<td>81.3%</td>
<td>12.1%</td>
<td>6.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>? Historical Avg %</td>
<td>-66.7%</td>
<td>-4.9%</td>
<td>-33.3%</td>
<td>-50.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>? Historical Avg</td>
<td>$200</td>
<td>$700</td>
<td>$1,000</td>
<td>$1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient C</td>
<td>$400</td>
<td>$22,500</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$25,900</td>
<td>$23,500</td>
</tr>
<tr>
<td>% Episode Spend</td>
<td>1.5%</td>
<td>86.9%</td>
<td>5.8%</td>
<td>5.8%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>? Historical Avg %</td>
<td>33.3%</td>
<td>58.5%</td>
<td>-50.0%</td>
<td>-25.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>? Historical Avg</td>
<td>$(100)</td>
<td>$(8,300)</td>
<td>$1,500</td>
<td>$500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- $2,400
Wave 1 – Phase I Average Implant Cost and Model Selection by HSP and Providers

1. Practice A performs surgeries at Hospital A that is contracted at an all-inclusive per diem rate therefore no cost information is available.
2. Practice E performs surgeries at Hospital E, which has not traditionally billed Horizon for these services, therefore no cost information is available.
3. N/A represents an Implant Type has been identified, but no associated Trailler Bill claim has not been received to date.
Outcomes Based Payment Model

Quality Metric Minimum Thresholds

- 100% Completion Data Research Submission¹

- Pre-op Antibiotic
- VTE Prophylaxis
- Pre/Post Funct Asses
- Level 1 NE Rates
- In-hospital deaths & level 2 NE

- 100% Reported

- Deaths

- = Target
- = Actual practice performance

Reviewed by Quality Committee to determine locus of control

Economic Metric Performance

Performance Improvement Economic Model

Average practice specific risk adjusted EOC cost

- PAC %
- PAC + Typical Reduction = Shared Savings
- PAC %
- Aggregated Typical / expected $
- Aggregated Typical / expected $

- Budget
- Actual

- Total EOC cost reduction relative to baseline EOC risk adj. total cost
- Total Cost reduction = shared savings
- Payment reconciliation conducted every 6 months
- No downside risk in phase 2

¹ Practice self-reported. Additional data derived from administrative claims data
Thank You

www.HorizonHealthcareInnovations.com
Improving Transitions and Reducing Avoidable Rehospitalizations

Webinar February 21, 2012
Peg M. Bradke, RN, MA
St. Luke’s Hospital, Cedar Rapids, Iowa
Heart Failure Team

- Formed in 2001
- In February 2006, St. Luke’s joined the RWJF/IHI TCAB Collaborative with a focus on improving discharge processes and reducing avoidable rehospitalizations.
- Initial focus was on the heart failure population with the goal of creating an “ideal” transition to home”.
- In 2010, changed focus to all Core Measure patients to develop reliable processes to ensure smooth transitions and compliance with CMS Core Measures.
- Serve on faculty with State Action on Avoidable Rehospitalizations (STAAR).
Why is Reducing Avoidable Rehospitalizations Strategic for St. Luke’s Hospital?

• It is part of our mission: “To give the care we would like our loved ones to receive”.
• It emphasizes care must not only be “better” but “demonstrably better” in a way that is noticeable and meaningful to the patients and families.
• The work is very patient/family-centered.
• Quality is measured in two domains: clinical outcomes and patient and family experience with care.
• It represents goals that are aligned with health care reform: providing better value for decreased costs.
## Need for a Paradigm Shift

<table>
<thead>
<tr>
<th>Past Focus</th>
<th>Focus Going Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional focus on discharging patients – a handoff</td>
<td>Facilitating transitions in care with a shift to handover (senders and receivers co-design the process)</td>
</tr>
<tr>
<td>$D/C$ to home</td>
<td>$Admission$ to $Home$ ($30$-day $LOS$)</td>
</tr>
<tr>
<td>Hospital problem</td>
<td>Continuum issue</td>
</tr>
<tr>
<td>Focus is on what clinicians are teaching</td>
<td>Focus on what the patient is learning</td>
</tr>
<tr>
<td>Patient is the recipient of the care</td>
<td>Patient and defined family are essential members of the care team. Initiating a post acute plan to meet the comprehensive needs of the patient.</td>
</tr>
<tr>
<td>Immediate focus on clinical needs</td>
<td>Focus on the whole person and their needs within social situation over time</td>
</tr>
<tr>
<td>Focus on patient care needs in each setting</td>
<td>Focus on the patient’s experience over time</td>
</tr>
</tbody>
</table>
Critical Capabilities for Care Redesign Include:

• Cross-continuum participation and alignment
• The development and use of standardized tools and compatible information infrastructure
• Horizontal Leadership and executive sponsorship; and
• Effective external and internal learnings
Cross Continuum Team Membership

- Day-to-day Leader
- Patients and family members
- Hospital clinicians and staff
  - Pilot units frontline, managers and case managers
  - Emergency Department
  - Palliative Care
  - Pharmacy
  - Cardio-Pulmonary Rehab
  - Hospitalists/PCPs
- Supporting staff (QI, IT, Finance, etc.)
- Clinical and administrative staff and/or leaders from the community
  - Skilled/long-term care nursing facilities
  - Office practice settings
  - Home health
  - Community or Public Health Services
Cross-Continuum Team

• Meets every other week to assess causes and opportunities for improvement.
• By including participants across the continuum of care and breaking down barriers to honest and candid communication, the team begins to construct a comprehensive picture of how and why readmissions occurred.
• Reviews process and outcome measures.
• Continually makes improvements, aggregating the experiences of patients, families and caregivers.
• Work gains executive sponsorship and support.
Cross-Continuum Teams

- One of the most transformational changes in the STAAR Collaborative
- Reinforces that readmissions are not solely a hospital problem
- Need for involvement at two levels:
  1. At the executive level to remove barriers and develop overall strategies for ensuring care coordination
  2. At the front-lines - power of “senders” and “receivers” co-redesigning processes to improve transitions of care
- New competencies in partnering across care settings will be a great foundation for integrated care delivery models. Secondary objectives come into focus: develop data analytics, performance improvement, clinical integration, and other competencies critical for additional value-based reforms.
Diagnostic Reviews

• Recommend that teams complete a formal review of the last five readmissions every six months (chart review and interviews).

• Members from the cross continuum team hear first-hand about the transitional care problems “through the patient’s eyes”.

• Engages the “hearts and minds” of clinicians and catalyzes action toward problem-solving.

• Opportunities for learning from reviewing a small sampling of patient experiences are innumerable.
Diagnostic Review Questions

Patients and Family Caregivers:
• What do you think caused you to be readmitted to the hospital?
• Did you see a physician in his/her office before you came back to the hospital? If not, why not?
• Has anything gotten in the way of your taking your medicines?
• How do you take your medicines and set up your pills each day?
• Describe your typical meals since you got home.

Care Team Providers in the Community:
• What do you think caused this patient to be readmitted?
State Action on Avoidable Rehospitalizations (STAAR) Initiative

The Commonwealth Fund-supported initiative to reduce avoidable 30-day rehospitalizations, taking states as unit of intervention.

• May 2009 - launch of the anticipated four-year initiative
• Institute for Healthcare Improvement providing technical assistance and facilitating a learning system
• Multi-stakeholder coalitions in three states selected as partners in this initiative (Massachusetts, Michigan, Washington); Ohio is a self-funded participant
• Approximately 150 hospitals in partnership with more than 500 community-based organizations are engaged in STAAR
STate Action on Avoidable Rehospitalizations

Improved Transitions and Coordination of Care

Reduction in Avoidable Rehospitalizations

Post-Acute Care Activated

Transition from Hospital to Home

Evidence-based Care in Community Care Settings (Better Models of Care)

Alternative or Supplemental Care for High-Risk Patients *

* Additional Costs for these Services

Patient and Family Engagement

Cross-Continuum Team Collaboration

Health Information Exchange and Shared Care Plans
Heart Failure Continuum of Care

- Standardized care through order sets
- Patients identified via BNP and IV diuretic daily reports
- Teaching
  - Utilizing Universal Health Literacy Concepts
  - Enhanced teaching materials
  - Teach Back
- Touch points
  - Home Care: Care coordination visit 24 to 48 hours post discharge
  - Hospital-based Heart Failure Clinic visit in 3-5 days with subsequent visits established with clinic and PCP based on needs of each individual
  - Follow-up phone call on post discharge at 5-9 days
  - Outpatient Heart Failure class
## Co-designing Processes to Improve Transitions

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>Office Practices</th>
<th>Home Care</th>
<th>Skilled Nursing Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Perform an enhanced assessment of post-hospital needs</td>
<td>• Provide timely access to care following a hospitalization</td>
<td>• Meet the patient, family caregiver(s), and inpatient caregiver(s) in the hospital and review transition home plan</td>
<td>• Ensure that SNF staff are ready and capable to care for the resident patient’s needs</td>
</tr>
<tr>
<td>• Provide effective teaching and facilitate enhanced learning</td>
<td>• Prior to the visit: prepare patient and clinical team</td>
<td>• Assess the patient, initiate plan of care, and reinforce patient self-management at first post-discharge home care visit</td>
<td>• Reconcile the Treatment Plan and Medication List</td>
</tr>
<tr>
<td>• Ensure post-hospital care follow-up</td>
<td>• During the visit: assess patient and initiate new care plan or revise existing plan</td>
<td>• Engage, coordinate, and communicate with the entire clinical team</td>
<td>• Engage the resident and their family or caregiver in a partnership to create an overall place of care</td>
</tr>
<tr>
<td>• Provide real-time handover communications</td>
<td>• At the conclusion of the visit: communicate and coordinate ongoing care plan</td>
<td></td>
<td>• Obtain a timely consultation when the resident’s condition changes</td>
</tr>
</tbody>
</table>
Enhanced Admission Assessment

- During Admission Assessment, the patient and family are asked, “Who would you like to have present when we provide your discharge information?”
- Medication Reconciliation: At times, the pharmacy or physician offices need to be called to get additional information. If the patient is a home care patient, the home care agency is called to get the current list of medications.
- Completing a comprehensive assessment requires additional time and care coordination (roles and responsibilities need to be designated, and standard work processes need to be developed)
- Role of Palliative Care
Enhanced Teaching and Learning

• The patient education materials facilitate the use of teachback, and the same materials are used across the continuum: in the hospital, with home care, long-term care settings and the clinic.

• Teachback - the process of asking patients to recall and restate in their own words what they have been taught - was incorporated at the patient’s bedside during the 24-48 hour post-discharge follow-up visit by Home Health and in the seventh day post-discharge phone call to the patient.

• Teachback question part of packet for staff and patient reference

• Patients and families are given a 12-month calendar for Heart Failure
Lung Packet Contents

1. What should you do first if you are having more trouble with your breathing?
   
   **Answer:**
   - Use good pursed lip breathing. Make sure you are pursing your lips together and breathing out long enough, which will help slow your breathing down. (Refer to blue pursed lip breathing education sheet) Count 1—2 for BREATH IN. . . . Count 1—2—3—4 for BREATH OUT
   - Use your fast-acting inhaler or your nebulizer, if you have one
   - What is the name of your fast-acting/rescue inhaler? __________
   - How often do you use it? ______________________

   **If your shortness of breath continues, without getting better, what should you do?**
   
   **Answer:**
   - If you use oxygen, make sure you have it on, that it is turned on and that the tubing is connected
   - Call your doctor

2. What are the warning signs for you that would indicate that you should call your doctor?
   
   **Answer:**
   - More shortness of breath than your usual
   - Increased amount of phlegm or thickness of your phlegm
   - Color change of phlegm, it should be clear or white, not yellow, brown, green or red
   - Increased coughing—even a dry cough, if that is not normal for you
   - Wheezing more
   - Fever/chills
   - Increased tiredness, more than your normal

3. What should you do to prevent from having a flare-up (getting worse) with your breathing and lungs?
   
   **Answer:**
   - Keep taking your medicines like your doctor wants you to.
   - Use your inhalers even though you may not feel like they are helping you much. (They really are)
   - If you have oxygen, make sure and use it for the number of hours that the doctor wants you to. Check to see that the tubing is connected and that the oxygen is turned on
   - Do not smoke and stay away from smoke-filled areas
   - Wash your hands often, which helps you from getting an infection
   - Stay away from irritants and those things that you know make our breathing and lungs worse.
   - Stay away from other people who may be sick
   - Eat healthy, get your sleep, be active everyday
Heart Failure Magnet

**Signs of Heart Failure**

If you have one or more of these symptoms:

- Weight gain of 3 pounds in 1 day or
- Weight gain of 5 pounds or more in 1 week
- More shortness of breath
- More swelling of your feet, ankles, legs or stomach
- Feeling more tired – no energy
- Dry, hacking cough
- Harder to breathe when lying down
- Chest pain

**Call doctor __________________________**

at __________________________

---

St. Luke's Hospital
Iowa Health System
Visit the NURSE Association
### Heart Failure Zones

<table>
<thead>
<tr>
<th>EVERY DAY</th>
<th>Every day:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Weigh yourself in the morning before breakfast and write it down.</td>
</tr>
<tr>
<td></td>
<td>• Take your medicine the way you should.</td>
</tr>
<tr>
<td></td>
<td>• Check for swelling in your feet, ankles, legs and stomach</td>
</tr>
<tr>
<td></td>
<td>• Eat low salt food</td>
</tr>
<tr>
<td></td>
<td>• Balance activity and rest periods</td>
</tr>
</tbody>
</table>

**Which Heart Failure Zone are you today?** *Green, Yellow or Red*

| GREEN ZONE | All Clear  *This zone is your goal*  
Your symptoms are under control 
You have: |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• No shortness of breath</td>
</tr>
</tbody>
</table>
|           | • No weight gain more than 2 pounds  
(it may change 1 or 2 pounds some days) |
|           | • No swelling of your feet, ankles, legs or stomach |
|           | • No chest pain |

| YELLOW ZONE | Caution  *This zone is a warning*  
Call your doctor’s office if: |
|-------------|-------------------------------------------------|
|             | • You have a weight gain of 3 pounds in 1 day or  
a weight gain of 5 pounds or more in 1 week |
|             | • More shortness of breath |
|             | • More swelling of your feet, ankles, legs, or stomach |
|             | • Feeling more tired. No energy |
|             | • Dry hacky cough |
|             | • Dizziness |
|             | • Feeling uneasy, you know something is not right |
|             | • It is harder for you to breathe when lying down. You are needing to sleep sitting up in a chair |

| RED ZONE | **EMERGENCY**  
Go to the emergency room or call 911 if you have any of the following: |
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• Struggling to breathe. Unrelieved shortness of breath while sitting still</td>
</tr>
<tr>
<td></td>
<td>• Have chest pain</td>
</tr>
<tr>
<td></td>
<td>• Have confusion or can’t think clearly</td>
</tr>
<tr>
<td>COPD Action Plan</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Which zone are you in today? Green, Yellow or Red</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Green Zone</strong></th>
<th><strong>For You to Do</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Clear - You are feeling well</strong></td>
<td>- Take your daily medicines as prescribed by your doctor, even if you are feeling good</td>
</tr>
<tr>
<td>- Your breathing is normal for you</td>
<td>- Eat healthy foods.</td>
</tr>
<tr>
<td>- The color of your phlegm is clear or white</td>
<td>- Be active every day (get up and do things)</td>
</tr>
<tr>
<td>- You can do your normal activities without unusual tiredness or shortness of breath</td>
<td>- Include some exercise, like walking, in your daily routine</td>
</tr>
<tr>
<td>- Your appetite is good</td>
<td>- Balance your activity with some rest periods</td>
</tr>
<tr>
<td>- You are sleeping like you normally do</td>
<td>- Use Pursed Lip Breathing</td>
</tr>
<tr>
<td>- You can think clearly</td>
<td>- Do not smoke. Make your home and car smoke free. Stay away from smoke areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Yellow Zone</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caution - You are feeling worse</strong></td>
</tr>
<tr>
<td>- You are more short of breath. You are wheezing or coughing more than usual</td>
</tr>
<tr>
<td>- You have unexplained changes in your weight</td>
</tr>
<tr>
<td>- You have more swelling in your feet, legs or ankles</td>
</tr>
<tr>
<td>- You notice changes in your phlegm (thicker, color, amount)</td>
</tr>
<tr>
<td>- You are using your rescue inhaler (the fast acting one) or your nebulizer more often than usual</td>
</tr>
<tr>
<td>- You are more tired and can not do your usual activities</td>
</tr>
<tr>
<td>- You have a fever and chills</td>
</tr>
<tr>
<td>- You are sleeping poorly. Your symptoms wake you up.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Red Zone</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency - You feel you are in danger</strong></td>
</tr>
<tr>
<td>- You have severe shortness of breath (You feel like you cannot breathe or catch your breath while resting)</td>
</tr>
<tr>
<td>- You have chest pain</td>
</tr>
<tr>
<td>- You feel faint</td>
</tr>
<tr>
<td>- You are more sleepy and have difficulty staying awake</td>
</tr>
<tr>
<td>- You feel confused or are very drowsy.</td>
</tr>
<tr>
<td>- Your speech is slurred</td>
</tr>
<tr>
<td>- You have bluish color to your lips or fingernails.</td>
</tr>
</tbody>
</table>
Low Sodium Eating Plan
2,000mg Sodium

Salt is also called “sodium” and is found in most foods you eat.

Why do you need to limit sodium in your diet?
Sodium acts like a sponge and makes your body hold onto water. Eating too much sodium can cause you to gain weight, make your legs swell, and cause water to collect in your lungs.

How much sodium can you have each day?
Doctors recommend that you eat less than 2000mg of sodium each day. This means taking the salt shaker off of your table and paying attention to the types of foods you eat.

The First Steps...
1. Do not add salt to foods when you cook or at the table
2. Use herbs and seasonings like Mrs. Dash that are sodium free
3. Start with fresh foods
4. Do not use instant foods that come in a can, bag, or box

Eat Less Added Salt

Choose this:
- Mrs. Dash
- Spices
- Herbs
- Lemon Juice
- Hot Sauce
- Fresh Garlic, Onion, Green Pepper
- Ketchup labeled “No Salt Added”

Do not choose this:
- Salt
- Seasoning Salts
- Meat tenderizer
- Soy Sauce
- Garlic Salt
- Bottled Salad Dressing
- Olives
- Relishes
- Cheese Sauce

- Sea Salt
- Mustard
- Ketchup
- BBQ Sauce
- Onion Salt
- Bouillon
- Sauerkrat
- Pickles
- Onion Soup Mix
<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
</tr>
<tr>
<td>6</td>
<td>8</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
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<td>My Weight</td>
</tr>
<tr>
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<td>14</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
</tr>
<tr>
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<td>My Weight</td>
<td>My Weight</td>
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<tr>
<td>27</td>
<td>28</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
<td>My Weight</td>
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Weigh yourself everyday. Compare to the day before. Have you gained weight?

- Always carry a list of your medications.
- Keep the list up to date.
- Don’t run out of medicine.
- Keep them refilled.

Strengthen your arms by lifting 2 or 3 pound hand weights while watching TV!

If you don’t have hand weights, you can use cans of soup, a bag of dried beans or an empty milk jug filled with some sand.
Teachback with Discharge Instructions

• Can you show me on these instructions:
  • How you find your doctors’ office appointment?
  • What other tests you have scheduled and when?
• Is there anything on these instructions that could be difficult for you to do?
• Have we missed anything?
Successful Teachback Rate
Aug 06 - Sep 11

- VNA teachback initiated
- Follow-up phone calls initiated
- Nurse competency evaluations in health literacy started

Legend:
- APN
- VNA
- In Hospital
Real-time Handover Communications

- St. Luke’s partnered with the hospital’s home care agency (VNA) and two long-term care facilities to standardize and enhance the quality of the handoff communication process. Warm handover with those patients with complex issues.
- Provided education for home care and long-term and skilled care RNs and CNAs on HF and continuity process. CNAs often observe symptoms.
- Provided the receiving nursing home facilities with the patient education packet.
- Designed standardized handover forms (“senders” and “receivers” agree upon the information and design reliable processes)
Post-Acute Care Follow-Up

- Home Care Visit set up for 24-48 hours after discharge. Home Care liaison in-house.
- Follow-up phone calls designated and share based on service. Same teachback questions utilized in hospital also used in calls to determine the patient and/or caregiver understanding of critical self-care management.
- Partnership with physicians’ offices resulted in redesign of scheduling HF visits to allow office visits within 3 to 5 days for all patients with HF in HF Clinic. HF Clinic also provides visits in the nursing facilities. Subsequent appointments established with Clinic, PCP or specialist based on patient’s assessment and need.
Number of Days after Discharge Patients are Readmitted
Three to Five-Day Follow-up
(Nov 07 – Sep 11)
HCAHPS RESULTS
DISCHARGE INFORMATION (% Yes)

#19 During hospital stay, did doctors, nurses or other hospital staff talk about whether you would have the help you needed when you left the hospital?
#20 During the hospital stay, did you get the information in writing about what symptoms or health problems to look out for after you left the hospital?
Heart Failure Readmissions (for Any Cause) within 30 Days

![Graph showing Heart Failure Readmissions over years 2006 to 2011 YTD. The graph indicates a decrease in readmissions from 2007 to 2011 YTD.]

Percent

- 2006: 25%
- 2007: 30%
- 2008: 22%
- 2009: 19%
- 2010: 20%
- 2011 YTD: 15%

Legend:
- %HF to Any Reason
- Median
Heart Failure Readmissions (for Any Cause) within 30 Days

![Graph showing heart failure readmissions over time with a horizontal line representing the median.](image-url)
Analysis of Results to Date

• Reducing readmissions is dependent on highly functional cross-continuum teams and a focus on the patient’s journey over time.
• Explicit focus on patient and family-centered work.
• Importance of engaged Executive Leadership and Physician Leadership.
• Improving transitions in care requires co-design of transitional care processes among “senders and receivers”. Frontline clinicians and staff involvement in developing the process improvements.
• Stories are as important as data.
• Providing intensive care management services for targeted high-risk patients is critical.
• Reliable implementation of changes in pilot units or pilot populations requires 18 to 24 months.
• Information Technology design is part of the work.
Barriers to Improving Care Transitions and Reducing Rehospitalizations

- Cost of copayments for medications and follow-up visits.
- Lack of coverage for home health services if patients did not meet Medicare’s “home-bound” requirements.
- Lack of reimbursement for transitional care services such as post-discharge phone calls, coaches and dedicated clinicians to provide extra support for patients and family caregivers.
- Limitations of the electronic medical record to capture and transmit information.
- Access to physician offices for follow-up visits.
- Complexity of patients with multiple co-morbidities.
- Challenges to completing reliable medication reconciliation.
Opportunities

- Rehospitalizations are frequent, costly and many are avoidable;
- Successful pilots, local programs and research studies demonstrate that rehospitalization rates can be reduced;
- Individual successes exist where financial incentives are aligned;
- Improving transitions state-wide requires action beyond the level of the individual provider; systemic barriers must be addressed;
- Leadership at the provider, association, community and state levels are essential assets in a state-wide effort to improve care coordination across settings and over time.
Questions for Presenters

1. Ask a question of one of today’s speakers by using the chat function.

2. Direct a question about CMS Innovation Center Bundled Payment for Care Improvement Initiative to: BundledPayments@cms.hhs.gov.
What’s Next—Upcoming Sessions

• March 13, 12:00 to 1:15 pm ET: Episode Definition for Care Improvement

• Announcements, slides and transcripts: http://cmmi.airprojects.org/bpci.aspx
Remember

The views expressed in these presentations are the views of each speaker and do not necessarily reflect the views or policies of the Centers for Medicare and Medicaid Services. The materials provided are intended for educational use and the information contained within has no bearing on participation in any CMS program.
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Suggestions about curriculum: bpci-web@air.org
ADLS info: http://cmmi.airprojects.org/bpci.aspx