Improving Chronic Care

Renee Coughlin PT, DPT, MHS
Steven Pamer PT, MPA, CGS

The Financial Imperative

- United States Economy
  - Cost $1 trillion annually and could reach $6 trillion by 2050
- Failure to contain the containable undermines:
  - Potential of extending health care coverage (the ACA)
  - Ability to cope with the medical costs of our aging population
United States Volumes

Reported Cases in The United States, 2003 (and as % of population*)

Cancer: 10,655,000 (3.7%)
Diabetes: 13,730,000 (4.9%)
Heart Disease: 18,140,000 (6.8%)
Hypertension: 36,781,000 (13.0%)
Stroke: 2,425,000 (0.9%)
Mental Disorders: 20,939,000 (10.7%)
Pulmonary Conditions: 49,020,000 (17.4%)

* As % of non-institutionalized population. Number of treated cases based on patient self-reported data from 2003 MEPS. Excludes untreated and undiagnosed cases.

United States Cost Burden

Economic Impact in The United States 2003 (Annual Costs in Billions)

<table>
<thead>
<tr>
<th>Economic Aspect</th>
<th>Cost (in Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Expenditures</td>
<td>$277</td>
</tr>
<tr>
<td>Lost Productivity</td>
<td>$1,047</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$1,324</td>
</tr>
</tbody>
</table>

Economic Impact: The Alternative Path

Impact on GDP in 2050

Real GDP in 2050
(In billions 2003 dollars)

| GDP in 2050, Current Path: | $32,229 |
| GDP in 2050, Alternative Path: | $37,898 |
| Potential Gain in GDP: | $5,668 (18%) |
Impact on Healthcare Spending

• Chronic conditions are widespread
• Primary consumers of health care
  - Drive most health care spending
• Account for 75% of all:
  - Hospital Days
  - Physician Office Visits
  - Home Health Care
  - Prescription Drugs

Human Costs

• Leading cause of death & disability in the U.S. (7 out of 10 deaths)
  - Heart disease, cancer & stroke account for 50% of all deaths
  - About 25% have ≥ 1 ADL limitation(s)
  - Arthritis is most common cause of disability (19 million Americans)
  - DM is leading cause of kidney failure, non-traumatic LE amputations and blindness among adults
Whoever said...

• If you always do what you’ve always done, you will always get what you’ve always got.”
How do we identify the appropriate patient?

• RISK STRATIFICATION
  - A tool used to identify those at low risk, moderate risk and high risk
    • Software written by our IT
    • Sits over the top of our EMR
    • Tools are only as good as the education to the staff

Risk Stratification Report

• Patient Code Zip Code
• M30 SOC M0032 ReSu
• M66 DOB Gender
• Diagnosis x 13 Falls
• M1000 Inpatient Facility
• M1032 Risk for Hospitalization
• M1034 Overall Status
Risk Stratification Report

- PHQ-2
- M1740 Cog Behavioral
- M1400 SOB
- M1410 Resp. Treatments
- M1302 Risk of Wound
- M1340 Surgical Incision
- M1100 Patient Living Situation

Risk Stratification Report

- M1910 Multi Factorial Fall Assess.
- M2100 Caregiver Management
- M2020 Oral Meds
- M2013 Injectable Meds
- Discipline at SOC
Cost Associated with HF

- 2008 study published in Health Services Research
- 1,435 hospitalizations of patients ≥ 60 years of age
- Median cost: $10,454


Our Hospital Has a Patient…

- Five admissions through the ED between 5/9/2014 and 8/29/2014
  - $10,454 X 5 = $52,270
  - $13,060 x 5 = $65,300
- Time for something different…
Cross-Continuum Collaboration

- Cardiologist
- Visiting Physician Practice
  - PCP and NP
- Visiting Palliative Medicine Physicians
- Home Health RN, PT and OT
  - All came together to pilot a “hospital at home” concept

Mr. J.

- 81 years old and living in the community in his own home
  - Chronic combined systolic and diastolic HF (NYHA Class III)
  - Cardiac Amyloidosis
  - Chronic hyponatremia
  - Oxygen 2LPM continuous
  - 9 additional comorbid conditions
  - DC home with PICC line in place
New York Heart Association Classifications

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<thead>
<tr>
<th>Class</th>
<th>Description</th>
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<tbody>
<tr>
<td>Class I</td>
<td>Patients experience no limitations; ordinary physical activity does not cause undue fatigue, dyspnea or palpitations</td>
</tr>
<tr>
<td>Class II</td>
<td>Patients experience slight limitation of physical activity; patients are comfortable at rest; ordinary physical activity results in fatigue, palpitations, dyspnea or angina</td>
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<tr>
<td>Class III</td>
<td>Patients experience marked limitation of physical activity. Although patients are comfortable at rest, less than ordinary activity leads to fatigue, dyspnea, palpitations or angina</td>
</tr>
<tr>
<td>Class IV</td>
<td>Symptoms of HF are present at rest; discomfort increases with any physical activity</td>
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</table>

Pilot: Hospital at Home

- Hospital DC 9/6/2014
- Home Health SOC 9/7/2014
- RN visits : 24
- PT Visits : 16
- OT Visits: 6
- NP Visits: 9
- MD Visits: 3
### September 2014

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Home Health Costs

- Fully loaded cost of 46 skilled home visits: $6440.00
- Reimbursement: $6402.12
- Net: $37.88
- Mr. J. passed away in March at home with the care of his siblings, children and Hospice services
Positive Outcomes

• The patient was able to remain out of acute care and in his home for the last 6 months of his life

• The patient’s family met their goal of keeping him home and participating in caring for him

Home Care Value Proposition

• Assuming the rate of 5 admissions per 4 months, the hospital saved 7.5 acute admissions, or:

• $7.5 \times \$10,454 = \$78,405$

• $7.5 \times \$13,060 = \$97,950$
Business-as-Usual

- Assumes the current baseline projections for 2003 to 2023 hold relative to:
  - The aging population
  - Behavioral risk factors and other demographic influences
  - Improvement in early detection and medical innovation
  - Health-care cost changes

Alternative Path

- Assumes a range of reasonable improvements in prevention, behavioral patterns, and treatment:
  - Reduction in Obesity
  - Continued reduction in smoking
  - Decline in alcohol consumption
  - Increase in physical activity
  - Percentage of people with high cholesterol stabilizes at 2000 levels
Two Paths, Two Choices

True Patient-Centered Care

- Paradigm shift in interaction with patients
- Validated partnership-based approaches (e.g. Motivational Interviewing) are superior for uncovering and addressing ambivalence and key motivational barriers to change
Partnership Model of Care

- Practitioners are the experts on disease; patients are the experts on their own lives
- Shared caregiving and responsibility for outcomes
- Patients identify the problems their diseases cause, e.g. limited mobility; practitioners help clarify

Partnership Model

- Patients set their goals and practitioners help them make informed choices
- Change is motivated internally; patient self-efficacy is key
Self-Care Support

• Focus on solving the problems that the medical condition causes through good care, self-care information and behavior change support (in contrast to patient education)

Mr. P.

• 84 year old former Marine
  - Comorbidities: CHF, Anxiety/Depression, DM, Ca, frequent UTIs
  - First admission with CCAH was 3/2014, 3 additional admissions through 12/2014
  - 17 (of 42) rehab visits by 6 different clinicians
Health Literacy

• The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions
Risk for Limited Health Literacy

- Increases in individuals with:
  - Lower education or socioeconomic level
  - Older adults with vision, hearing or memory disorders
  - Limited English proficiency (when the providers speak only English)

Assessing Health Literacy

- The Newest Vital Sign (Pfizer/Weiss et al., 2005)
  - Uses a nutrition label to assess an individual’s ability to follow physician instructions regarding health
Nutrition Facts
Serving Size  1/4 cup
Servings per container  4

Amount per serving
Calories  250  Fat Cal  120
%DV
Total Fat  13g  20%
Sat Fat  9g  40%
Cholesterol  28mg  12%
Sodium  55mg  2%
Total Carbohydrate  30g  12%
Dietary Fiber  2g
Sugars  23g
Protein  4g  8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.


Health Literacy
Universal Precautions
Toolkit

11/2/2015
Patient Activation

- Found to be strongly related to a broad range of health-related outcomes
- Patients are an untapped resource in the effort to improve health care quality
  - Benefit to themselves, health care delivery systems and our nation
Patient Activation Assessment®
©Eric Coleman, MD, MPH

- Tracks patient progress in skill transfer and activation along the Four Pillars® during participation in the Care Transitions Intervention®
  - Medication Management
  - Red Flags
  - Medical Care Follow Up
  - Personal Health Record

Time Points for Completion

- First home visit (baseline)
- After each contact
- At discharge
- Evaluations are tracked on the Patient Activation Assessment form
### Patient Activation Assessment

**Level of Performance (Please rate: 1 point each)**

<table>
<thead>
<tr>
<th>Medication Management</th>
<th>Red Flags</th>
<th>Medical Care Follow Up</th>
<th>Personal Health Record (PHR)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>__ Demonstrates effective use of Medication Management System (medication organizer, flow chart, etc.) __</td>
<td>__ Demonstrates understanding of Red Flags, or warning signs that condition may be worsening __</td>
<td>__ Can schedule and follow through on appointment(s) __</td>
<td>__ Understands the purpose of PHR and the importance of updating PHR __</td>
<td></td>
</tr>
<tr>
<td>__ For each medication, understands the purpose, when and how to take, and possible side effects __</td>
<td>__ Reacts appropriately to Red Flags per education given (or understands how to react appropriately) __</td>
<td>__ Writes a list of questions for PCP and/or specialist and bring to appointment __</td>
<td>__ Agrees to bring PHR to every health encounter __</td>
<td></td>
</tr>
<tr>
<td>__ Demonstrates ability to accurately update medication list __</td>
<td>__ Agrees to confirm medication list with PCP and/or Specialist __</td>
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</tbody>
</table>

**Sum: /4**  
**Sum: /2**  
**Sum: /2**  
**Sum: /2**  

**Total Score: /10**

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### WISE Model

**Warning Signs**
- What trouble signs do I watch for?
- What do I do if I get worse?
- Who can help me watch for trouble signs and get help if I need it?

**Impact**
- Why do I have this condition?
- What is the best and worst that I can expect?
- How will this condition affect my daily life now and in the future?

**Self-Care Steps**
- Which medications do I take and how do I take them?
- Which self-treatments and foods are best for me?
- Who can support me in my daily self-care?

**Evidence-Based Care**
- Which tests do I need and how often do I need them?
- Which treatments and medications should I ask my doctor about?
- What are the risks of these treatments and medicines?
WISE Model of Chronic Conditions

- Better engage patients
- Facilitate better health care
- Facilitate health behavior changes
- Puts the spotlight on the patient, not the disease
- Bring barriers to health improvement to the surface
- Helps clinicians leverage their expertise

Focus on The Big Five

- Coronary Artery Disease (CAD)
- Heart Failure (HF)
- Diabetes
- Chronic Obstructive Pulmonary Disease (COPD)
- Asthma
Why The Big Five?

- Because they are:
  a) Prevalent
  b) Costly
  c) Associated with standards of care
  d) Have a significant impact on health

**HF: Self-Care Steps**

<table>
<thead>
<tr>
<th>Follow CAD Self-Care Recommendations</th>
<th>Most HF patients can benefit from general CAD self-care recommendations for diet, weight management, stress management, and coping. Patients with HF should obtain a physical activity prescription that specifies the activity type, intensity, and duration according to their HF severity level and functional status.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor Weight Daily</td>
<td>Weight monitoring helps quickly identify fluid retention. Patients should weight themselves upon rising, after they have urinated, but before eating breakfast. They should also notify their physician immediately if they experience a daily weight gain of more than 2-3 pounds.</td>
</tr>
<tr>
<td>Manage Sodium Intake</td>
<td>Sodium intake should be limited to 2,000 milligrams per day. Patients should be particularly careful of hidden sodium in many packaged and prepared foods.</td>
</tr>
</tbody>
</table>
HF: Self-Care Steps, continued

<table>
<thead>
<tr>
<th>Manage Fluid Intake</th>
<th>Some physicians may also recommend restrictions of daily fluid intake.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage Alcohol Intake</td>
<td>Avoid alcohol or consume no more than two to three alcoholic drinks per week.</td>
</tr>
<tr>
<td>Adjust Sleeping Position</td>
<td>Sleep with head propped at a 45 degree angle if experiencing shortness of breath.</td>
</tr>
</tbody>
</table>

Other Self-Care Considerations

- Lifestyle Management
  - Diet and Nutrition
  - Hydration
  - Weight Management
  - Physical Activity
  - Stress Management
  - Tobacco Cessation
Health Coaching

• Ideal Approach
  - Appropriate for across continuum
  - Well to seriously ill
  - Younger to older
  - Less or more educated or verbal
  - Practical in any patient encounter
  - Any member of health care team, clinical and non-clinical

Ideal Approach…continued

• Validated steps for teaching and proficiency
• Supported by standardized, validated tools
• Patient-centered, but flexible for practitioners to apply clinical expertise and address priorities
• Proven to deliver better patient-level outcomes
### Motivational Interviewing (MI)

- Currently the only approach that meets the Ideal Approach criteria
- The patient, rather than the practitioner, voices the arguments for the behavior change
- Outperforms traditional advice-giving in the treatment of a broad range of behavioral problems and diseases

### Patient Talk – Three Types

- **Change Talk**: Statements in favor of change
- **Sustain Talk**: Statements that represent ambivalence about change
- **Discord**: Statements that represent an interpersonal tension between the patient and practitioner
Practitioner Behaviors

• MI-consistent (MIC)
  - Ask for permission
  - Validate patient’s position, barriers to change, challenging situation
  - Support patient control/autonomy
  - Provide affirmations that address strengths or patient activation

MI-inconsistent Behaviors (MIIN)

• More consistent with the traditional patient education model
• Confronting, directing, providing information or advice without permission
• Higher levels of MIIN are associated with higher levels of resistance
• Lower levels of MIIN, with greater patient engagement
Comparison of Approaches

<table>
<thead>
<tr>
<th>Traditional Medical Model</th>
<th>MI-Based Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert</td>
<td>Collaborative</td>
</tr>
<tr>
<td>Authoritarian</td>
<td>Evocative</td>
</tr>
<tr>
<td>Judgmental</td>
<td>Empathetic</td>
</tr>
<tr>
<td>Confrontational or pushy</td>
<td>Supportive of autonomy and choice</td>
</tr>
<tr>
<td>Based on premise that information changes behavior</td>
<td>Based on evidence-based behavior change science</td>
</tr>
<tr>
<td>Objective is to direct and tell what to do</td>
<td>Objective is to activate and empower</td>
</tr>
<tr>
<td>Emphasis on gathering and sharing information</td>
<td>Emphasis on encouraging self-care</td>
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<tr>
<td>Goal is treatment adherence and positive clinical outcome</td>
<td>Goal is treatment adherence</td>
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</tbody>
</table>

Basic Skills in MI

- Open Questions
- Affirmations
- Reflections
- Summaries
Challenges

- Non-adherence
- Patients who are stuck
- Passive patients
- Cultural differences
- Low health literacy
- Older patients with cognitive issues
- Multiple chronic conditions
- Mental illness

Move from Volume to Value

- 90% of all Medicare spending has a link to quality by 2018
- 50% of all Medicare payments tied to quality or value through alternative payment models by 2018
  - ACOs
  - Bundled Payment for Care
  - PCMH/Medicaid Health Homes
Home Health Value-Based Purchasing (HHVBP)

• Proposed Implementation 1/1/16
  - 5 years 2016 to 2022
• Basis for HHVBP
  - Tie quality to payment to improve outcomes
  - Payment adjustments that reward/penalize will incent providers
  - ACA requires HHS to develop plan for HHVBP under Medicare

6 HHVBP Domains
29 Metrics

• Clinical Quality of Care
• Communication and Care Coordination
• Efficiency and Cost Reduction
• Patient Safety
• Patient and Caregiver Centered Experience (CAHPS)
• Population/Community Health
Cleveland Clinic

Every life deserves world class care.