Respiratory Care: Adding Value to the Hospital’s Bottom-line

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Mount Sinai Health System
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Adding Value to the Hospital’s Bottom-line

Objectives:

- To provide a financial ‘snapshot’ of the US health care system and how hospitals are paid.
- To identify how Respiratory Therapists can contribute to the success of hospitals
Part 1:
Snapshot of the U.S. Health Care System

I. Test Your Knowledge
II. U.S. Health Care: Global Context
III. Health Care Reform Initiatives
Part 2: How Do Hospitals Get Paid?
How do RT’s add value

I. Medicare, Reform and the Hospital’s Bottom-line
II. Value-based Reimbursement
III. How Respiratory Therapists Add Value
Part 1: Test Your Knowledge
### Annual Per Capita Health Care Expense

<table>
<thead>
<tr>
<th>OECD* Member Nation</th>
<th>Annual Per Capita Health Care Expense</th>
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* OECD* Member Nation

* Organization for Economic Cooperation and Development
2. Fill in the Blank:

Before the ACA, approx. 1 in ____ Americans was uninsured.

[Hint: ~ 316 million US population 2013]

- In this survey, the American health system was ranked:
  A. 1\textsuperscript{st}
  B. 37\textsuperscript{th}  [31\textsuperscript{st} in life expectancy]
  C. Just behind Slovenia; just ahead of Costa Rica
4. True or False:

Hospitals are reimbursed based upon what they charge the governmental and private health insurance companies.
5. True or False: Health care reform is a concept introduced just recently in the US health care system.
6. True or False:

All hospitals are at least breaking even in the USA today.
7. Multiple choice: The Medicare Program:

A. Provides health insurance for elderly and disabled Americans
B. Is a significant source of revenues for hospitals
C. Funds medical education
D. Solvency has improved recently
E. All of the above
8. Multiple Choice:  
An “ACO” Accountable Care Organization:

A. Was the initial cost/quality of care initiative proposed under health reform

B. Consists of a defined group of patients cared for by a network of doctors/hospitals

C. Proposes Medicare risk and ‘profit’ sharing with providers

D. Employs evidence-based care protocols

E. All of the above
9. Multiple Choice: Respiratory care plays a significant role in:

A. National Patient Safety Goals
B. Publically-reported hospital outcome and safety ratings
C. Hospital length of stay
D. Value-based reimbursement
E. All of the above
II. US Health Care: The Global Context
Total Per Capita Health Expenditure

(2012 or most current year)

Source: OECD 2014 Health Data
Private sector pays 55% of US health care dollar.
What Does the Money Buy?

75% of Total Health Care Spending* in OECD Nations is for Hospitals, Physicians and Pharmaceuticals

- Hospitals: 43%
- Physicians: 17%
- Pharmaceuticals: 15%
- All Other

Source: OECD Health Data, 1998  *Median Data
Total Hospital Beds per 1000 Population

OECD Average: 4.8
USA: 3.1

Source: OECD Health Data, 2014
Discharges per 100,000 Population (all causes)

Source: OECD Health Data, 2014
Average Length of Stay is Falling Worldwide Remains Lower in the USA

Source: OECD Health Data, 2014
Physicians per 1000 Population

Source: OECD Health Data, 2014
USA: 31.8% with Public Health Insurance Coverage
~1 in 6-7 Americans Uninsured in 2011
Number of Uninsured Americans is Declining

Exhibit 1. The Number of Uninsured Declined to 40.7 Million by January–March 2014

Source: Early Release of Selected Estimates Based on Data from the January–March 2014 National Health Interview Survey. U.S. Centers for Disease Control and Prevention, Sept. 2014.
US Health Care Quality: mixed

- W.H.O. 2000 ranking world health systems:
  - 8 measures of cost, access, goal attainment, financial fairness, overall performance and health.
  - USA = 37th (after Costa Rica and just above Slovenia)
    - Infant/maternal mortality (prematurity/prenatal care)

- Urban Institute/RW Johnson Foundation: USA
  - last of 19 in avoiding preventable deaths
  - Asthma mortality double OECD average
    - 2x average adult asthma hospital admissions
  - Ranks high in cancer survival rates
Projected Spending on Health Care (% of GDP)

~$2.9 trillion ~18% GDP
Since 2009

Total National Health Spending

Medicare Spending

Medicaid Spending

Source: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group
Cost Discourages Proper Care

Putting Off Care Because of Cost

In the past 12 months, have you or another family member living in your household... because of the COST, or not?

- Relied on home remedies or over the counter drugs instead of seeing a doctor: 34%
- Skipped dental care or checkups: 34%
- Put off or postponed getting health care you needed: 30%
- Not filled a prescription for a medicine: 26%
- Skipped recommended medical test or treatment: 22%

Costs on the Rise: Obesity Epidemic

McKinsey & Co. report*:  
Per capita healthcare costs increment attributed per point of BMI greater than 30: $300

- ~35% of adults are Obese in US

- Obesity ranking by State:
  - #43 New York at 24.5%
  - Mississippi # 1 at 35%
  - Colorado # 50 at 20%

(2011 data, adults 20-64)
III. US Health Care Reform Initiatives

History of Reform
Private & Governmental Initiatives
Health Care Reform is Not New

1912 T. Roosevelt: Social/Industrial Justice

1944 FDR: Second bill of rights; SSA

1948 Truman: Fair deal expanded SSA to include health care

1965 Johnson: Great society policy
   Established Medicare and Medicaid programs

1973 Nixon: HMO act: fed. qualified HMOs

1993 Clinton: Children’s health plans

2010 Obama: Patient Protection and Accountable Care Act
1990’s: Private Sector Steps into the Void

- Business Rebels Against Insurance Premiums
- Managed Care Grows
- Health care costs stabilized in the 1990’s
1999 HMO Enrollment Stabilizes at ~80m

### National Managed Care Enrollment 2013

<table>
<thead>
<tr>
<th>Type</th>
<th>Enrollment 2013</th>
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</thead>
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<tr>
<td>Health Maintenance Organization (HMO)</td>
<td>80.5 million</td>
</tr>
<tr>
<td>Preferred Provider Organization (PPO)</td>
<td>151.6 million</td>
</tr>
<tr>
<td>Point of Service (POS)</td>
<td>14.6 million</td>
</tr>
<tr>
<td>High Deductible Health Plan (HDHP)</td>
<td>15.5 million</td>
</tr>
<tr>
<td>Total</td>
<td>262.2 million</td>
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</table>
Health Reform Bills Enacted 2010

Patient Protection and Affordable Care Act (PPACA): March 23

Health Care and Education Reconciliation Act of 2010: March 30

Ongoing:
- Implementation regulations
- Congressional Funding
- Legal challenges
Health Reform 2013: New Initiatives

Medicare Bundled Payment Program

One payment per ‘episode of care’

– national pilot program
– acute inpatient and outpatient care
– hospital and physician services
– post acute care
Medicare Quality Measures

Hospital payments tied to high cost surgical, cardiac and pneumonia care measures
– Readmission and nosocomial infection rate penalties

Up to 3% of percent of Medicare payments at risk = $$ millions

Part 1: Summary

US health care is most expensive in the world
- Fewer hospital beds/MDs/LOS
- 1 in 6-7 Americans uninsured
- Quality?

Reforms are underway
- limit resources/reimbursement
- new regulations/penalties increase expenses

Quality counts and providers can add value
Part 2: How Do Hospitals Get Paid? How do RT’s add value

I. Medicare, Reform and the Hospital’s Bottom-line
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Hospitals and Physicians rely heavily on Medicare Payments

**Medicare Benefit Payments By Type of Service, 2012**

- **Medicare Advantage**: 23%
- **Outpatient Prescription Drugs**: 10%
- **Hospital Inpatient Services**: 26%
- **Skilled Nursing Facility**: 5%
- **Physician Payments**: 13%
- **Other Services**: 13%
- **Home Health**: 6%
- **Hospital Outpatient Services**: 4%

Total Benefit Payments = $536 billion

NOTE: Excludes administrative expenses and is net of recoveries. *Includes hospice, durable medical equipment, Part B drugs, outpatient dialysis, ambulance, lab services, and other services.

Introduction to Medicare

- 1950 Census
  - Elderly = 8% of population
  - 2/3 earned < $1000/yr.
  - 1 in 8 had health insurance

- President Johnson– Hospital Ins. (A)
- Congressman Mills- Physician. Ins. (B)
  "usual and customary"
  "reasonable"
Medicare: Government Health Insurance

- Enacted 1965 (with Medicaid)
- 1966 19m > 65 years old
- 1973 Disabled/E.S.R.D.
- 2010..... 37m elderly
  7m disabled
  ~ 44m
# The A, B, C’s and D of Medicare

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<th>Programs</th>
<th>Funded by:</th>
</tr>
</thead>
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<tr>
<td>Part A - Hospital (HI) GME</td>
<td>Employers/ees 89% Premiums 11%</td>
</tr>
<tr>
<td>Part B - Physician (SMI)</td>
<td>Premiums 25% General Revenues</td>
</tr>
<tr>
<td>Part C - Managed 1997 Medicare</td>
<td>Payroll/Income Tax</td>
</tr>
<tr>
<td>Part D - Rx 2006</td>
<td>Part B pool</td>
</tr>
</tbody>
</table>
Good Old Days

Retrospective cost-based reimbursement
- If you spend it all, we will pay you next year
  (Would you economize with this deal?)

Operating costs grew!
Good Old Days

Hospitals built
Equipment purchased
Debt grew..........

Medicare paid!
DRGs and the Ninja CFO

Prospective Payment

- Diagnosis-related Groups
- One payment per hospital stay
- Some outlier exceptions
- Some geographic cost consideration
DRGs and the Ninja CFO

Effect of Prospective Payment:
- Shorter hospital stays
- Less resource intensive
- Cultural upheaval
- Patient/Physician dissatisfaction
- Empty hospital wings
- Heavy debts, lower revenues
Future of Medicare
Is Medicare sustainable?

- Technology and Rx advances
- Part D $$: unbudgeted costs
- Baby boomers retire (2010-2030)
  - Population > 65 doubles by 2030
  - Boomers live longer! Expect more!
Jan. 2011: 1st Baby Boomers Started Retiring

Ratio of working population to > 65 Yrs.
Life expectancy of 65 year old

2030 = 1 in 5 > 65!
Accountable Care Organization (ACO)

1st major cost/quality reform initiative

- Networks of doctors/hospitals
- A defined group (5000+) patients
- Providers share in Medicare savings
- Manage care using:
  - quality and cost targets
  - evidence-based protocols
Evidence-based medicine

Do providers employ recommended processes in prescribing care?

“Only 54.9% of patients receive scientifically indicated care.”

(McGlynn, et al NEJM’03)
Evidence-based medicine?

“It ain't so much what we don't know that gets us into trouble, as what we do know that ain't so.”

—Mark Twain*

*Also attributed to: Artemus Ward, Kin Hubbard, and Will Rogers
Federal Evidenced-based Medicine Initiatives

Surgical Care Improvement Project (SCIP)

“Postoperative complications account for 22% of preventable deaths” - JAMA 2003

Goal:

Reduce the incidence of surgical complications by 25% by 2010 via prevention/treatment of:

- Surgical infections
- Thromboembolism
- Perioperative cardiac events
Surgical Infections

40% of hospital acquired infections occur in surgical patients

- Antibiotic prophylaxis
  - Within 60 mins. < surgery

- Major cardiac surgery
  - Controlled periop. serum glucose
SCIP Respiratory Measures

Transform Organizational Culture

Educate Staff on Providing Quality Care

Redesign Processes

Standardize Processes to Improve Care and Consistency

(Protocols: weaning/ventilator management)

Measure and Report Performance

Use Data to Drive Quality Improvement
### Healthcare-Associated Infections in US Acute Care Hospitals (2011)

<table>
<thead>
<tr>
<th>Major Site of Infection</th>
<th>Estimated No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pneumonia</strong></td>
<td>157,500</td>
</tr>
<tr>
<td>Gastrointestinal Illness</td>
<td>123,100</td>
</tr>
<tr>
<td>Urinary Tract Infections</td>
<td>93,300</td>
</tr>
<tr>
<td>Primary Bloodstream Infections</td>
<td>71,900</td>
</tr>
<tr>
<td>Surgical site infections from any inpatient surgery</td>
<td>157,500</td>
</tr>
<tr>
<td>Other types of infections</td>
<td>118,500</td>
</tr>
<tr>
<td><strong>Estimated total number of infections in hospitals</strong></td>
<td>721,800</td>
</tr>
</tbody>
</table>
Postoperative pneumonia

Occurrence

- 9-40% of patients
- Associated mortality of 30-45%
- Preventable with medical intervention

Costs per pneumonia:*  
- Uncomplicated: $27,000
- Complex: ++
- High morbidity/mortality

*Thompson Ann Surg 2006
Pneumonia Hospital Compare Measures

- Oxygenation Assessment
- Pneumococcal/Flu Vaccination
- Blood Culture in ED < Antibiotic
- Adult Smoking Cessation Counseling
- Antibiotic selection/timing
Children’s Inpatient Asthma Care

- Use of relievers
- Use of systemic corticosteroids for inpatient asthma
Medicare Payments to Hospitals at Risk

By 2015:

- ~ 9% of total funding at risk ($10 billion)
- linked to hospital’s success in reducing:
  - Reducing readmissions
  - Reducing hospital-acquired conditions
  - Public reporting of medical errors

20% readmission rate!!
The Government and the Public are watching......

http://www.medicare.gov/hospitalcompare

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>UNIVERSITY OF LOUISVILLE HOSPITAL</th>
<th>KENTUCKY AVERAGE</th>
<th>NATIONAL AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia patients given the most appropriate initial antibiotic(s)</td>
<td>100%</td>
<td>94%</td>
<td>96%</td>
</tr>
</tbody>
</table>

*Higher percentages are better*
# Mortality and Readmission Rates for Pneumonia/COPD

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<th>UNIVERSITY OF LOUISVILLE HOSPITAL</th>
<th>U.S. NATIONAL RATE</th>
</tr>
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<tbody>
<tr>
<td>Rate of unplanned readmission for pneumonia patients</td>
<td>No different than the National Rate</td>
<td>17.3%</td>
</tr>
<tr>
<td>Death rate for pneumonia patients</td>
<td>No different than the National Rate</td>
<td>11.9%</td>
</tr>
<tr>
<td>Rate of unplanned readmission for chronic obstructive pulmonary disease (COPD) patients</td>
<td>No different than the National Rate</td>
<td>20.7%</td>
</tr>
<tr>
<td>Death rate for chronic obstructive pulmonary disease (COPD) patients</td>
<td>No different than the National Rate</td>
<td>7.8%</td>
</tr>
<tr>
<td>Ranking</td>
<td>State</td>
<td>Number of A Hospitals</td>
</tr>
<tr>
<td>---------</td>
<td>---------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>1</td>
<td>Maine</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Massachusetts</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Virginia</td>
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</tr>
<tr>
<td>4</td>
<td>New Jersey</td>
<td>35</td>
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<td>5</td>
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<td>76</td>
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<tr>
<td>6</td>
<td>Illinois</td>
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<tr>
<td>7</td>
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<td>15</td>
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<td>16</td>
<td>Montana</td>
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<td>29</td>
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<td>42</td>
<td>Oklahoma</td>
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<tr>
<td>43</td>
<td>Utah</td>
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<tr>
<td>44</td>
<td>District of Columbia</td>
<td>0</td>
</tr>
<tr>
<td>45</td>
<td>North Dakota</td>
<td>0</td>
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Respiratory Care affects ~ 1/3 of the Safety Score Process and Outcome Measures

Hand hygiene
Ventilated patient care
Iatrogenic pneumothorax
Postoperative respiratory failure
CLABSI
Regulatory Compliance: TJC

National Pt. Safety Goals: 2015

– Identify patients correctly (name + DOB)

– Use medicines safely

– Use alarms safely (audible and responded to)

– Prevent infections
  • Hand hygiene per the CDC or W.H.O.
  • Central line & SSI reduction

Source: http://www.jointcommission.org/assets/1/6/2015_HAP_NPSG_ER.pdf
What can Respiratory Therapists do?

▶ Respiratory Care Departments are cost centers
▶ Charges do not equal revenues

BUT………..

▶ RTs do contribute to:
  – Fewer/Shorter Hospital Stays
  – Cost reduction
  – Competitive advantage
Cost reduction/revenue ideas:

- Prevent admissions/readmissions
  - Asthma/COPD patient education/prevention
  - Case management role
- Reduce LOS
  - Weaning/Ventilatory Support Management
    - Fast tracking protocols
  - Prevent nosocomial infection
    - Hospital /ventilator- acquired pneumonias
- Improve Outcomes
Enhance competitive position

▶ Reduce waste
  – Cost awareness
  – Efficient practices

▶ Innovate
  – Faster, better, less expensively
  – Measure outcomes

▶ Satisfy patients and payers
  – Exceed expectations for success
Summary: US Healthcare

Financial Pressures
- Escalating costs
- Reduced /bundled reimbursements
- Workforce shortages

- Regulatory Pressures
  - Privacy
  - Quality/Access to Care
  - Coordination of care
Summary: How Hospitals are Paid

Medicare is the major single payer

Health care reform: federal & state
- increases competition between hospitals
- financial stress-reimbursement penalties
- focus on value *not volume* delivered
- requires care coordination
What else can Respiratory Therapists do?

Monitor the trends:

High Tech/Specialization (Geriatrics?)

Life-long learning, research, teaching

Efficiency, professionalism, patient satisfaction
Career Ladders in Allied Health

According to the Bureau of Labor Statistics, employment of medical and health services managers is expected to grow 16% from 2008 to 2018.
An Overview of the US Health Care System

I. Check Your Knowledge
1. Match: Nation & Its Health Spending

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*Per capita = per unit of population

** Organization for Economic Cooperation and Development
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[Hint: ~ 316 million US population 2013]

- In this survey, the American health system was ranked:
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(1/3 of US hospitals have expenses that exceed revenues.)
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