The Impact of Palliative Care Integration on Healthcare’s Value Equation

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Objectives

• New realities in aging, multimorbidity and complexity in the U.S
• The value equation in the context of these new realities
• The role of palliative care in complexity care
• Case studies of palliative care in integrated healthcare models
Population Aging

- Best practice life expectancy (the highest value recorded in a national population) has increased 3 mo/yr since 1840

Christensen K et al Lancet 2009;374:1196
Population Aging

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>0-14 yrs</td>
<td>62.13</td>
<td>54.75</td>
<td>30.99</td>
<td>29.72</td>
<td>11.20</td>
<td>5.93</td>
</tr>
<tr>
<td>15-49 yrs</td>
<td><strong>29.09</strong></td>
<td>31.55</td>
<td>37.64</td>
<td>17.70</td>
<td>6.47</td>
<td>4.67</td>
</tr>
<tr>
<td>50-64 yrs</td>
<td>5.34</td>
<td>9.32</td>
<td>18.67</td>
<td>16.27</td>
<td>24.29</td>
<td>10.67</td>
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<tr>
<td>65-79 yrs</td>
<td>3.17</td>
<td>4.44</td>
<td>12.72</td>
<td>28.24</td>
<td><strong>40.57</strong></td>
<td>37.22</td>
</tr>
<tr>
<td>&gt;80 yrs</td>
<td>0.27</td>
<td>-0.06</td>
<td>-0.03</td>
<td>8.07</td>
<td>17.47</td>
<td>41.51</td>
</tr>
</tbody>
</table>

Age-specific contributions to increase in record life expectancy in women*

- Life expectancy initially related to decreases in infant mortality
- Since the 50’s, mortality rates for 80+ has continued to fall

Christensen K et al Lancet 2009;374: 1196
Growth of Chronic Illness

Condition in Millions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Illness</td>
<td>1 in 3</td>
</tr>
<tr>
<td>CVD</td>
<td>1 in 4</td>
</tr>
<tr>
<td>HTN</td>
<td>1 in 5</td>
</tr>
<tr>
<td>Arthritis</td>
<td>1 in 7</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>1 in 9</td>
</tr>
<tr>
<td>DM</td>
<td>1 in 12</td>
</tr>
<tr>
<td>CHD</td>
<td>1 in 17</td>
</tr>
<tr>
<td>COPD</td>
<td>1 in 20</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>1 in 26</td>
</tr>
<tr>
<td>Cancer</td>
<td>1 in 30</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>1 in 68</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control; NHLBI, NIAMS
Growth in Multimorbidity

Figure 1. Prevalence of two or more of nine selected chronic conditions among adults aged 45 and over, by age and sex: United States, 1999–2000 and 2009–2010

- **Total**
  - **65 and over**: 37.2% (1999–2000), 45.3% (2009–2010)

- **Men**
  - **45–64**: 15.2% (1999–2000), 20.6% (2009–2010)
  - **65 and over**: 39.2% (1999–2000), 49.0% (2009–2010)

- **Women**
  - **65 and over**: 35.8% (1999–2000), 42.5% (2009–2010)

1Significantly different from 1999–2000, p < 0.05.

NOTE: Access data table for Figure 1 at: [http://www.cdc.gov/nchs/data/databriefs/db100_tables.pdf#1](http://www.cdc.gov/nchs/data/databriefs/db100_tables.pdf#1).

SOURCE: CDC/NCHS, National Health Interview Survey.

Fried VM et al. NCHS Data Brief; #10. July 2012
Impact of Multimorbidity on Hospitalization

Wolff, J. NIA Comorbidity Conference, 2005
## Multimorbidity: Medicare Expenditures

<table>
<thead>
<tr>
<th>Number of Chronic Conditions</th>
<th>Mean Medicare Expenditures Per Beneficiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$211</td>
</tr>
<tr>
<td>1</td>
<td>$1,015</td>
</tr>
<tr>
<td>2</td>
<td>$1,870</td>
</tr>
<tr>
<td>3</td>
<td>$3,204</td>
</tr>
<tr>
<td>4</td>
<td>$5,246</td>
</tr>
<tr>
<td>5</td>
<td>$8,159</td>
</tr>
<tr>
<td>6</td>
<td>$11,948</td>
</tr>
<tr>
<td>7+</td>
<td>$23,825</td>
</tr>
</tbody>
</table>

## Other Indicators of “Complexity”

<table>
<thead>
<tr>
<th>CHD + Diseases</th>
<th>CHD + Clinical Factors</th>
<th>CHD + Health Status Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>&gt; 4 Rx meds</td>
<td>3.15 Mobility difficulty</td>
</tr>
<tr>
<td>Art + DM</td>
<td>&gt; 4 Rx meds + dizzy or falls or falls + incontinence</td>
<td>4.65 Mobility difficulty + hearing impair</td>
</tr>
<tr>
<td>Art + CLRT</td>
<td>&gt; 4 Rx meds + incont</td>
<td>3.51 Hearing impair</td>
</tr>
<tr>
<td>Art + CHF</td>
<td>Incontinence</td>
<td>1.11 Mobility difficulty + visual impair</td>
</tr>
<tr>
<td>DM</td>
<td>&gt; 4 Rx meds + low GFR + incont</td>
<td>4.44 Visual impair</td>
</tr>
</tbody>
</table>

Courtesy of Weiss, Boyd, Wolff, Leff
Chronic **Serious Illness**

- Longer survival with advanced disease
- High illness and symptom burden
- Management complexity increased
  - Patient/caregiver fatigue
  - Ongoing financial stressors from serious illness
  - Multiple providers
  - Dynamic goals and treatment preferences
  - Conflicting/interacting treatment regimens
Illness, complexity and cost

10% of patients account for 64% of total costs

40% account for 31% of total costs

50% account for 3% of total costs

Illness, complexity and cost

Concentration of expenditures, 2002

Percent of total expenditures

- Top 1%: (≥$35,543)
- Top 5%: (≥$11,487)
- Top 10%: (≥$6,444)
- Top 20%: (≥$3,219)
- Top 50%: (≥$664)
- Bottom 50%: (<$664)

Illness, complexity and cost

Distribution by age, 2002

Value = \frac{Quality}{Cost}

The value equation...

What does this mean for the seriously ill with complex care needs?
Quality: What Do Patients with chronic Serious Illness Want?

• To have trust and confidence in the doctors looking after you

• Not to be kept alive on life support when little hope for a meaningful recovery

• Information about one’s disease communicated to you by your doctor in a honest manner

Heyland DK et al. CMAJ 2006;174:5
Quality: What Do Patients with chronic Serious Illness Want?

- To complete things and prepare for life’s end
- To not be a physical/emotional burden to family
- Upon discharge, have an adequate plan of care
- To have relief of symptoms

Heyland DK et al. CMAJ 2006;174:5
And What They Get ...

Mortality follow-back survey of family members or other knowledgeable informants representing 1578 decedents

Not enough ...
- contact with physician: 78%
- emotional support (pt): 51%
- information about the dying process: 50%
- emotional support (family): 38%
- help with pain/dyspnea: 19%

THANK YOU FOR SUFFERING IN SILENCE
Cost

- Health premiums for workers have risen 114 percent in the last decade.
- U.S. spending 17% GDP, >$7,000 per capita/yr
- Despite high spending, 15% of our population has no insurance
- Lack of health coverage contributes to at least 45,000 preventable deaths/year.

How does palliative care contribute to the value equation in chronic serious illness?
Palliative Care

• Specialized medical care by a team of doctors, nurses and specialists for people with serious illnesses. This type of care is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness—whatever the diagnosis.

• The goal is to improve quality of life for both the patient and the family.

• Palliative care is appropriate at any age and at any stage in a serious illness, and can be provided together with curative treatment.

Palliative care is about matching treatment to patient goals.

Palliative Care Hits the High Notes

Key Messages:
Palliative care sees the person beyond the cancer treatment.
Palliative care is all about treating the patient as well as the disease.
It’s a big shift in focus for health care delivery—and it works.

What can I do? TAKE ACTION!
www.acscan.org/palliativecare

ACSCAN Capitol Hill ad campaign 2012
Palliative Care = Supportive Care = Team Care

Tailored Interdisciplinary Assessment & Treatment Plan
Intake Review
Tailored Plan of Care, & Referral to Community Resources

Symptom management
Supportive Care and Counseling
Nutrition Support
Spiritual Care
Financial and Social Support
Coordination

Whole Person Approach
Tailored Interdisciplinary Assessment & Treatment Plan

Follow-up
Palliative Care- Dynamic, Not Linear...

...For when illness burden impacts the person or their loved one
Palliative Care and Patient/Caregiver Satisfaction

Mortality follow back survey palliative care vs. usual care (N=524 family survivors)
Overall satisfaction markedly superior in palliative care group, p<.001;

Palliative care superior for:

- emotional/spiritual support
- information/communication
- care at time of death
- access to services in community
- pain
- well-being/dignity
- care + setting concordant with patient preference
- PTSD symptoms

Palliative Care and Quality

• In a prospective multicenter study of 332 seriously ill cancer patients, recall of occurrence of a prognostic/goals conversation was associated with:
  – Better quality of dying and death
  – Lower risk of complicated grief + bereavement
  – Lower costs of care
  – Less ‘aggressive’ care

Wright et al. JAMA 2008;300:1665-73.
Palliative Care and Healthcare Utilization

“Expanded” hospice/CM services to 387 Aetna beneficiaries with advanced illness

Spettell CM et al. JPM 2009; 12: 827-832
Common Gaps in Palliative Care

ACCOUNTABLE CARE ORGANIZATIONS

...An opportunity to fill in the gaps for value and care delivery for those with serious illness
Opportunities of new delivery models

✓ Delivery system re-design targeted to the highest-risk populations-- those with advanced disease and/ functional impairment-- key to success at improving quality and the patient/family experience.

✓ Training and skills- early integration of palliative care and geriatrics

(Policy) Goal: Add palliative care/geriatrics to the eligibility specifications/metrics for medical homes, accountable care organizations, and bundling strategies.
How should we envision a fully integrated (accountable) health care system for the most seriously ill?

Primary Care (always)

Specialty Care (often)

Palliative Care
Geriatrics
Hospice (most times)

Courtesy of Allan Ramsay/CAPC
Managed care of the 80’s ≠ ACO’s

• More Knowledge
• More Data
• More Guidelines and Quality Metrics
• More Collaboration
• More Physician Control

Emanuel EJ. JAMA. 2012 Jun 6;307(21):2263-4
Case studies of palliative care integration across the continuum

- Vermont
- Michigan
- California
Vermont and health reform (Act 48)?

- Department of VT Health Access:
  - Create Exchange
  - Expand insurance coverage
  - Expand Blueprint primary care

- Green Mountain Care Board:
  - Cost containment and improving the health of Vermonters

- Governor’s Office and Secretary of Administration:
  - Planning (operational and financial) for single payer

Courtesy of Allan Ramsay
What works?

Seven critical success factors:
1. Primary care physicians are in control
2. Clinicians are paid for quality not quantity via risk sharing
3. All-payer rate standardization
4. Regionalization of costly services
5. Limits on supply/capacity for costly services
6. Primary physicians follow their patients in the hospital
7. **There are well integrated palliative care and hospice services**

Bodenheimer T, West D. NEJM 2010; 363:1391-93
Developed a palliative care “delivery system” to make it accessible and fully integrated

**Primary palliative care** (outpatient PCMH or inpatient)
- Giving bad news and discussing prognosis
- Advanced care planning
- COLST

**Tertiary Palliative Care** (usually inpatient, specialty clinic, or HHA)
- Complicated symptom management
- Multidisciplinary intervention during acute illness
- Goals of care discussions about burdensome life supporting therapies

**Specialty (cardiology, nephrology, oncology) Palliative Care**
- Checklists
- Incentives

*Courtesy of Allan Ramsay*
Vermont Oncology Pilot Project

1. Patient-centered medical home, Cancer Center, community hospital palliative care and home health agency come to the table

2. Problems identified:
   - PCP’s lose track of their cancer patients until late in their course,
   - Oncologists often pressured to provide disease modifying therapies late in the disease course,
   - Palliative care consulted too infrequently
   - Payers have seen significant cancer cost acceleration in imaging, drug costs, and the last thirty days of life

3. Consultation with expertise in operational advising, system design, and coordination expertise

4. GMCB provides cost analysis for cancer patients in the hospital service area with potential four year savings

Courtesy of Allan Ramsay
# Estimated Cost Savings

<table>
<thead>
<tr>
<th>State-wide four year cancer expenditure</th>
<th>$$$</th>
<th>5% savings</th>
<th>7% savings</th>
<th>10% savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>588,873,731</td>
<td>29,443,687</td>
<td>41,221,161</td>
<td>58,887,373</td>
</tr>
<tr>
<td>Medicaid</td>
<td>100,685,832</td>
<td>5,034,292</td>
<td>7,048,008</td>
<td>10,068,583</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>689,559,563</strong></td>
<td><strong>34,477,979</strong></td>
<td><strong>48,269,169</strong></td>
<td><strong>68,955,956</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Pilot Community Hospital</th>
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</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>13,849,653</td>
<td>692,483</td>
<td>969,476</td>
<td>1,384,965</td>
</tr>
<tr>
<td>Medicaid</td>
<td>6,029,475</td>
<td>301,474</td>
<td>422,063</td>
<td>602,948</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,879,128</strong></td>
<td><strong>993,956</strong></td>
<td><strong>1,391,539</strong></td>
<td><strong>1,987,913</strong></td>
</tr>
</tbody>
</table>

*Courtesy of Allan Ramsay*
Michigan: Hospice takes action

Hospice of Michigan

- Contract with DMC Michigan Pioneer ACO
- Contract talks in progress with two additional ACOs
- Expanding contracts with all major insurers
- Potential Pilot with the State of Michigan retirees to reduce health care legacy costs

Courtesy Hospice of Michigan (HOM)
How?

Tier 3

- Telesupport 24/7/365
- Outcomes Analytics
- Predictive Modeling
- ER & Hospital Transition Coaches
- Analytics
- AIM Home Services 24/7/365

Courtesy Hospice of Michigan (HOM)
Michigan: Hospice of Michigan

XYZ HMO Costs 6 Months Pre and Post @HOMe Support™ Program

XYZ HMO Cost Trends - Actual Costs

Entry Month of @HOMe Support™ Program

Courtesy Hospice of Michigan (HOM)
California: Blue Shield and a Global Budget Pilot Project

- Pilot ACO in Sacramento area for 41,000 California Public Employees’ Retirement System (CalPERS) employees/dependents enrolled in a Blue Shield HMO
- Focused review of the 5,000 patients accounting for 75 percent of total health care costs

Blue Shield Pilot Strategies

• Coordinate pre- and postdischarge planning processes to avoid delays and readmissions
• Personalize care and disease management
• Develop a comprehensive palliative care program across hospital, physicians, and care managers to engage patients and their families in end-of-life decisions
• Implement home-based medical care for high-risk, frail, elderly patients to improve their quality of life

Blue Shield Pilot Project Outcomes

• Health care costs for CalPERS members ↓1.6 % from the 2009 baseline amount (nonmembers: 9.9 % ↑ from 2009).

• Inpatient days for CalPERS members ↓12.1 % (nonmembers: ↑ of 2.5%)

• Hospital readmissions within 30 days of discharge ↓ 15 %, from an already low 5.4 percent

• Extended hospital stays—those of twenty days or longer—↓ by 50 %

Take Home Messages

• All clinicians/partners need to be at the table
• Pay attention to the details: operational planning and implementation- patient attribution, defining appropriate quality indicators, cost analysis
• Don’t fret over what it is called: “supportive care,” “advanced illness management,” “palliative care.” Hospice will always be hospice.
• Have systems in place for communication, communication, communication, and for tracking the data.
Summary

- Palliative care is about quality: person/caregiver focused, informed choices, comfort and quality of life—an essential element in the value equation for the seriously ill.

- **Byproduct:** more appropriate utilization and communication- lower costs

- Planning is key to address supportive/palliative care needs across the continuum
We Can Do Better