How health plans can improve cancer care: from utilization management to delivery reform

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Aetna

Aetna Values & Oncology Solutions
Mission Statement

We give our members access to high-value, personalized cancer care models. We collaborate with oncology teams that deliver best-in-class care by using evidence-based medical guidelines, clinical decision support tools and services that improve the patient’s experience, increase effectiveness of care and lower costs. Our value-based approach, powered by data analytics and transparency of policy and payment, allows us to move from a fee-for-service platform to a value-driven system that rewards Oncology practices for quality care throughout the patient’s care journey.
Outline

- Why does oncology need a solution?
- Evidence based treatment as a solution
- The oncology medical home as a better solution
- Aetna as solution provider

Cancer is the most costly medical item and increasing at 2-3x the rate of other costs

Aetna's top cost drivers in cancer care

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Rx</td>
<td>30.8%</td>
<td>$1.5B</td>
</tr>
<tr>
<td>Inpatient</td>
<td>23.3%</td>
<td>$1.1B</td>
</tr>
<tr>
<td>Radiology</td>
<td>22.4%</td>
<td>$1.1B</td>
</tr>
<tr>
<td>Specialist Physician</td>
<td>9.4%</td>
<td>$483M</td>
</tr>
</tbody>
</table>

*Source CY Claims; Commercial & Medicare; All Funding; Excludes AGB/SH/SRC

Death rates from cancer are decreasing but the decline is small compared to heart disease.

The Health Care System Produces $750 Billion in Yearly Waste

~30% of health spending is waste

Fraud
Inflated prices
Inefficient care delivery
Excess administrative costs
Unnecessary services
Prevention failures

U.S. health care system waste

Source: Institute of Medicine; 2009 data
Health Care Premiums are Growing at 3x the Rate of Inflation and Wages

Cumulative increases from 1999-2012

172% Health insurance premiums
47% Workers’ earnings
38% Overall inflation


Consumers are Paying for Half the Increase in Medical Premiums

COST SHARE

2007 - 2012
COST INCREASE $6,228

48% (contributions + out of pocket) $2,989
52% $3,239

Responses to the huge and growing expense of cancer care?

- Pay less
- Manage more (prior auth)
- Shift responsibility to member (co-pay, value based insurance, reference pricing)
- Pay for performance (gain share)
- Shift risk (ACO)

Assessing the Cost and Efficacy in Cancer Care means solving for the Value Equation

\[ V = \frac{Q}{C} \]

- Guideline Based Therapies
- Targeted Impact
- Low Toxicities
- Improved Survival
- Improved QOL

- Best Supportive Care
- Avoidance Hospital Days
- Avoidance ED Visits
- Site of Service Costs ↓
- Medically Unnecessary Care ↓ at EOL
Increased adherence to evidence based guidelines lowers cost without negatively impacting treatment efficacy

**Study:** “Cost Effectiveness of Evidence-Based Treatment Guidelines for the Treatment of Non-Small-Cell Lung Cancer in the Community Setting”

**Published:** Journal of Oncology Practice (ASCO Peer Reviewed Journal), 1/19/2010

**Purpose:** Evaluate the cost effectiveness of evidence-based treatment pathways for NSCLC patients

**Conclusion:** Results of this study suggest that treating patients according to evidence-based guidelines is a cost-effective strategy for delivering care to those with NSCLC.

Significantly lowered cost in the case group vs. The control group

No change in overall survival between the study groups


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**Special Series: State of Oncology Practice**

**Original Contribution**

**The National Practice Benchmark for Oncology, 2013 Report on 2012 Data**

By Elaine L. Troxel, CMPE, Thomas B. Bire, MBA, and James L. Seneca, RN

Oncology Metrics, a division of Altus Solutions, Los Altos, CA

**Figure 10.** Source of clinical pathways (practices, 46; full-time equivalent [FTE] hematology/oncology physicians, 304; FTE physicians, 391).

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Results on Evidence Based Medicine Adherence

Pre-Pilot Baseline Adherence
For every 100 patients treated in 6 oncology practices in the 6 months prior to using the clinical decision support system, 62 received an evidenced based treatment plan

Pilot Group Adherence
For every 100 patients treated in 6 oncology practices when using the clinical decision support system during the pilot, 87 received an evidenced based treatment plan

• Our study showed a 43% relative improvement in adherence to evidence based treatment selection
• Peer-reviewed, published evidence-based treatment options, sourced from leading oncology guideline bodies such as the American Society of Clinical Oncology and the National Comprehensive Cancer Network, were selected for 25 more patients for every 100 cancer patients in our study

Adherence to Evidence Based Medicine by Cancer Type
Results Exceeding our Expectations

• Baseline adherence data on more than 200 patients was pulled from chart review of 5 practices for the 6 month period prior to the start of our pilot
• We compared our study group of 103 patients against this baseline data, examining changes in evidence based adherence – in total, the absolute increase was 25%, a 43% relative increase
Pathways require

- Evidentiary and operational process
- Measurement and reporting

Pathways are derived from a focus on high quality, cost effective regimens

1. Major Compendia
   - Eligible for Instant Authorization
   - Eligible for Instant Authorization
   - Eligible for Instant Authorization

2. Equal Efficacy (NCCN Categories 1, 2A)
   - Eligible for Instant Authorization
   - Eligible for Instant Authorization
   - Eligible for Instant Authorization

3. Side Effect Profile
   - Eligible for Instant Authorization
   - Eligible for Instant Authorization

4. Cost
   - Eligible for:
     - Instant Authorization
     - Quality Performance Plan

Preferred Pathways

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Enabling physicians with clinical decision support tools helps improve care, reduce costs and maintain quality.

Aetna oncology pilot study with 156 physicians in 7 locations

Net savings of $393,599 included in reduced ER visits, in-patient hospital stays and spend on certain drugs

Regimen increase of generic only utilization

28% treatment variability reduced

11%
Clinical Decision Support Options

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What are the PCMH joint principles?

- Personal physician
  - Each patient has an ongoing relationship with a personal physician
  - Personal physician leads a team of individuals that takes responsibility for the ongoing care of patients
  - Personal physician is responsible for providing for all the patient’s health care needs or arranging care with other qualified professionals

- Care is coordinated across health care system

- Quality and safety are hallmarks of the medical home

- Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication

- Payment recognizes the added value provided to patients who have a patient-centered medical home
Expected benefits to health care consumers

- Improved health outcomes supported by doctors’ use of clinical decision-support tools to improve care management, tracking and adherence to evidence-based guidelines

- Reduced hospitalizations and ambulatory care
  - Includes primary and readmissions
  - Includes sensitive specialty/facility and other costs

- Improved transition of care

- Shared decision-making

- Increased engagement in preventive health and wellness

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**PCMH 2011 Content and Scoring**

<table>
<thead>
<tr>
<th>PCMH1: Enhance Access and Continuity</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Access During Office Hours**</td>
<td>4</td>
</tr>
<tr>
<td>B. After-Hours Access</td>
<td>2</td>
</tr>
<tr>
<td>C. Electronic Access</td>
<td>2</td>
</tr>
<tr>
<td>D. Continuity</td>
<td>2</td>
</tr>
<tr>
<td>E. Medical Home Responsibilities</td>
<td>2</td>
</tr>
<tr>
<td>F. Culturally and Linguistically Appropriate Services</td>
<td>4</td>
</tr>
<tr>
<td>G. Practice Team</td>
<td>20</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PCMH2: Identify and Manage Patient Populations</th>
<th>Pts</th>
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</thead>
<tbody>
<tr>
<td>A. Patient Information</td>
<td>3</td>
</tr>
<tr>
<td>B. Clinical Data</td>
<td>4</td>
</tr>
<tr>
<td>C. Comprehensive Health Assessment</td>
<td>5</td>
</tr>
<tr>
<td>D. Use Data for Population Management**</td>
<td>16</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>PCMH3: Plan and Manage Care</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Implement Evidence-Based Guidelines</td>
<td>4</td>
</tr>
<tr>
<td>B. Identify High-Risk Patients</td>
<td>3</td>
</tr>
<tr>
<td>C. Care Management**</td>
<td>4</td>
</tr>
<tr>
<td>D. Manage Medications</td>
<td>3</td>
</tr>
<tr>
<td>E. Use Electronic Prescribing</td>
<td>3</td>
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<tr>
<td><strong>Total Pts</strong></td>
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<thead>
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<th>PCMH4: Provide Self-Care Support and Community Resources</th>
<th>Pts</th>
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</thead>
<tbody>
<tr>
<td>A. Support Self-Care Process**</td>
<td>6</td>
</tr>
<tr>
<td>B. Provide Referrals to Community Resources</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PCMH5: Track and Coordinate Care</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Test Tracking and Follow-Up</td>
<td>6</td>
</tr>
<tr>
<td>B. Referral Tracking and Follow-Up**</td>
<td>6</td>
</tr>
<tr>
<td>C. Coordinate with facility/Care Transitions</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PCMH6: Measure and Improve Performance</th>
<th>Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Measure Performance</td>
<td>4</td>
</tr>
<tr>
<td>B. Measure Patient/Family Experience</td>
<td>4</td>
</tr>
<tr>
<td>C. Implement Continuously Quality Improvement**</td>
<td>4</td>
</tr>
<tr>
<td>D. Demonstrate Continuous Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>E. Report Performance</td>
<td>3</td>
</tr>
<tr>
<td>F. Report Data Externally</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Pts</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

**Must Pass Elements**
How does this apply to oncology?

- Evidence based medicine
- Enhanced access
- Shared decision making
- Coordination of care
- Quality reporting
- Payment reform

Inpatient Utilization of Chemotherapy Patients

ER visits per chemotherapy patient have dropped by 70 percent since 2005

Source: Dr. John Sprandio. Reused with permission. Do not distribute.
Hospital admits per chemotherapy patient have dropped by 50 percent since 2007

How do you accomplish this?

- Triage reform
- Patient education
- ?Extended office hours
Figure 1. Mean total cancer-related costs for each of the last 6 months of life for (A) inpatient and hospice and (B) outpatient (OP) services. ER, emergency room; ESA, erythropoiesis-stimulating agent; G-CSF, granulocyte colony-stimulating factor.

<table>
<thead>
<tr>
<th>Measure</th>
<th>2009-07</th>
<th>2010</th>
<th>Percent change, 2009-07 to 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of deaths among cancer patients*</td>
<td>236,821</td>
<td>210,302</td>
<td>-10.5%</td>
</tr>
<tr>
<td>Hospital utilization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of deaths occurring in hospital</td>
<td>26.1</td>
<td>24.7</td>
<td>-14.4%</td>
</tr>
<tr>
<td>Percent hospitalized, last month of life</td>
<td>61.7</td>
<td>62.2</td>
<td>1.5%</td>
</tr>
<tr>
<td>All hospital days per patient, last month of life</td>
<td>5.1</td>
<td>4.6</td>
<td>-9.2%</td>
</tr>
<tr>
<td>Percent admitted to ICU, last month of life</td>
<td>37.7</td>
<td>28.8</td>
<td>21.6%</td>
</tr>
<tr>
<td>ICU days per patient, last month of life</td>
<td>1.3</td>
<td>1.6</td>
<td>21.2%</td>
</tr>
<tr>
<td>Cancer treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent receiving life-sustaining treatment, last month of life</td>
<td>9.2</td>
<td>9.4</td>
<td>2.1%</td>
</tr>
<tr>
<td>Percent receiving chemotherapy, last 6 weeks of life</td>
<td>6.0</td>
<td>6.0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Supportive care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent enrolled in hospice, last month of life</td>
<td>54.6</td>
<td>61.3</td>
<td>12.2%</td>
</tr>
<tr>
<td>Hospice days per patient, last month of life</td>
<td>8.7</td>
<td>9.1</td>
<td>4.3%</td>
</tr>
<tr>
<td>Percent enrolled in hospice within three days of death</td>
<td>8.3</td>
<td>10.9</td>
<td>30.8%</td>
</tr>
<tr>
<td>Physician utilization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent seeing 10 or more physicians, last six months of life</td>
<td>46.2</td>
<td>58.5</td>
<td>26.8%</td>
</tr>
</tbody>
</table>

*The estimate for 2009-07 was created by summing a 20% sample over the individual years.
Via Oncology Pathways’ Treatment Summary

- Auto-generated at end of Tx
  - State/stage of disease
  - Actual treatment delivered
- Can be edited, printed and saved within Pathways
- Pre-populated with Survivorship Pathways (incl. Surveillance Plan)
- Ability to display:
  - Response, Reason for Stopping
  - Actual toxicities and hospitalizations
- Customizable by practice

Quality reporting: clinical process measures

1. Adherence to evidence based treatment guidelines (including treatment exceeding lines of therapy and documentation of off-pathways reasons)
2. Cancer staging
3. Performance status
4. Pain assessment
5. End of life metrics (ACP documentation, hospice enrollment, hospice length of stay)
6. Patient satisfaction
Quality reporting: financial measures

1. ER visits (and costs)
2. Hospitalization rate (and costs)
3. Chemotherapy costs

**NOTE:** These measures form the basis for the shared savings calculation
ER and Hospital: Index Practice

<table>
<thead>
<tr>
<th></th>
<th>ER</th>
<th>IP</th>
<th>IP LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast (n=52)</td>
<td>29</td>
<td>24</td>
<td>3.7</td>
</tr>
<tr>
<td>Colon (n=14)</td>
<td>14</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Lung (n=24)</td>
<td>18</td>
<td>31</td>
<td>5.4</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>76</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Chemotherapy costs

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>ME</th>
<th>CP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>52</td>
<td>28325</td>
<td>25307</td>
</tr>
<tr>
<td>Colon</td>
<td>14</td>
<td>28819</td>
<td>38616</td>
</tr>
<tr>
<td>Lung</td>
<td>24</td>
<td>19576</td>
<td>17892</td>
</tr>
</tbody>
</table>

Effective patient management programs streamline care delivery and reduce costs

- Greater adherence to Pathways regimen
  - 76% vs 63%

- Fewer cancer related ER visits and in-patient admissions
  - 10% vs 14%

- Fewer cancer-related in-patient hospital days
  - 2.1 vs 1.2
Reimbursement Models

1. Implementation fee
2. Management fee
3. Enhanced fee schedule
4. S codes
5. Shared savings
6. Prior auth relief

S codes

- Treatment plan
- End of treatment summary
- Advanced care plan
- Oral chemotherapy management fee
Aetna Oncology Medical Home payment for oncology care means growth instead of shortfall

Our goal is to create a sustainable business model designed around new sources of value that will be resilient through and post health care reform.

*Diagram is illustrative and for discussion purposes only

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The typical oncology practice has challenges

1. Average number of physicians=5
2. About 60% utilizing an EMR
3. Staffing margins very lean
4. Unable to develop and implement standardized scripting organically.
5. Unable to measure and report impact of program.

**Aetna’s Oncology Solutions**
What Patients need from a coordinated Care Management Oncology Program:

A Virtual Patient Navigator

Patient Navigator Relationships

Patient Navigator

Patients

Healthcare Team

Community Resource Providers

The Virtual Nurse Navigator in Action

1. Patient identification and initial outreach with focus on education.
2. Ongoing evaluation of symptom and toxicity burden.
3. Management focused on optimal patient outcome
Aetna Compassionate Care (ACCP)

Goals of the program:
• Provide additional support to members with advanced illness and their families/caregivers
• Help them access optimal care

Help member understand options, with nurse case managers who are trained to:
• Assess and manage members’ care in a culturally sensitive manner
• Identify resources to make members as comfortable as possible, addressing pain and other symptoms
• Help coordinate medical care, benefits and community-based services
• Inform the member about treatment options, continuity of care and advanced care planning
• Provide personal support
• Consult and coordinate with the members’ treating physicians and staff

As community oncologists migrate to hospital systems, cost increases

172 clinics closed
323 practices struggling financially
44 practices sending ALL patients elsewhere for treatment
224 practices acquired by a hospital
102 practices merged/acquired
Hospital providers need a new business model for financial sustainability

Private payers are Hospitals’ most profitable business...

...And they are a shrinking part of Hospital revenues

Source: Avalere Health analysis of American Hospital Association Annual Survey data, 2010
Compared Episode of Cancer Care Costs in Different Settings: An Actuarial Analysis of Patients Receiving Chemotherapy

Aetna's Oncology Solutions

Table 4: Total Average Chemotherapy Episode Costs and Chemotherapy Session Costs: Comparison by Site of Service

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Average Allowed Cost per Episode</th>
<th>Average Allowed Cost for all Sessions in an Episode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POY (Std)</td>
<td>HDP (Std)</td>
</tr>
<tr>
<td>Metastatic</td>
<td>NEOCIC</td>
<td>$52,840</td>
</tr>
<tr>
<td></td>
<td>ORC</td>
<td>$122,500</td>
</tr>
<tr>
<td></td>
<td>Breast</td>
<td>$115,358</td>
</tr>
<tr>
<td>Adjuvant</td>
<td>NEOCIC</td>
<td>$44,769</td>
</tr>
<tr>
<td></td>
<td>ORC</td>
<td>$79,016</td>
</tr>
<tr>
<td></td>
<td>Breast</td>
<td>$37,629</td>
</tr>
</tbody>
</table>

Source: Authors' analysis of MarketScan data for the years 2010 and 2011. Differences in costs are driven by pharmacy cost, site of service, and payer.

Infusion of Care and Community

Table 4. Program 340B participation is on the rise, spurred by loosened eligibility criteria and increased discounts included in the Affordable Care Act.

Participation in 340B

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
</tr>
<tr>
<td>43%</td>
</tr>
<tr>
<td>40%</td>
</tr>
<tr>
<td>10%</td>
</tr>
</tbody>
</table>

Don’t Know
No
Yes

Significant difference: Year 2 vs. Year 3 (p = 0.01)
Significant difference: Year 1 vs. Year 3 (p = 0.01)

Q1: Have you ever participated in the 340B (Public Health Services) drug pricing program? Q2: Have you ever chosen a 340B drug pricing program as part of your future NCCN treatment plan?
The "5 Step" Oncology Care Delivery Process...

OMH practices are excellent partners for ACO’s

Hospital contracts with Aetna to provide Medical Home solution to its network oncologists

Tools enable ACO to benchmark community practices

ACO engages oncology practices in shared savings arrangements or episode-based reimbursement
Why does bundling make sense in oncology?

1. Care occurs in discrete episodes
2. There is variability that does not impact quality
3. Bundling in the form of “episode payments” has worked for other medical conditions
Oncology reimbursement reform is a step-wise process

Vendor based programs introduce Clinical Pathways and Measure Adherence along with Quality Measures. Smaller Practices work with Education Oncology programs such as NJ ION program. More sophisticated Practices move from vendor based Clinical Pathways programs to Oncology Medical Homes (OMH). Create episode and bundling methodology test with OMH, as well as deployed in ACOs. OMH deployed in 65% of markets and ACOs by 4Q15.

Vendor Oncology Programs
Cardinal, New Century Health, Innova

Oncology Medical Homes

Bundles/Episode Payments

OMH, ACOs, Bundles

Vendor engagement Index

Low Touch
Some Clinical Engagement
Aetna’s Oncology Solutions

High Touch
More Clinical Engagement

High Clinical Engagement

WE CANNOT SOLVE OUR PROBLEMS WITH THE SAME THINKING WE USED WHEN WE CREATED THEM
- Albert Einstein

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OCMO – Oncology Solutions Team

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PROPRIETARY AND CONFIDENTIAL