Transforming the Business of Oncology through Science and Technology
Clinical Pathways: With What Result?

Moderator
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Panelists
Marcus Neubauer, M.D., VP and Medical Director, Value-Based Reimbursement, McKesson Specialty Health and The US Oncology Network

Constantine Mantz, M.D., Chief Medical Officer, 21st Century Oncology

Andrew Hertler, M.D., Chief Medical Officer, New Century Health
The Role of Clinical Pathways in a Changing Environment

Marcus Neubauer, MD
VP and Medical Director, Value-Based Reimbursement
McKesson Specialty Health and The US Oncology Network

February 6, 2017
## Introduction

<table>
<thead>
<tr>
<th><strong>196 oncology practices</strong> participating in the Oncology Care Model (OCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>McKesson Specialty Health supports ~33% of all physicians and ~17% of all practices accepted into the OCM through its technology and services</td>
</tr>
<tr>
<td>• This includes practices in The US Oncology Network, Onmark and Vantage Oncology</td>
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<table>
<thead>
<tr>
<th><strong>17 payers</strong> participating in OCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many commercial payers are referencing the OCM</td>
</tr>
<tr>
<td>• Quality metrics</td>
</tr>
<tr>
<td>• Payment methodology</td>
</tr>
<tr>
<td>• Total cost of care is a dominant theme in most value-based agreements</td>
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Some practices in The US Oncology Network have **more than 80%** of their patient volume tied to value-based reimbursement

### Keys to success
- Practice transformation
- Technology and automation
- Ability to scale

Merit-Based Incentive Payment System (MIPS) will play a dominant role and change our focus on quality going forward
What Do Value-Based Models Look Like in Oncology?

**Pathways / Care Mgmt**
- Pre-defined, evidence-based recommendations for delivering care specific to patient presentations
- Reimbursement dependent on adherence to pathway

**Episodes**
- Single upfront payment for each episode
- Drugs reimbursed at ASP+0%
- Episode payment can increase if outcomes improve or total cost of care decreases

**Oncology Medical Home**
- Comprehensive program of payment reform, care redesign, and measurement
- Reimbursement may include care management fee, drug costs, infrastructure payments, enhanced service fees, and shared savings

Example: 
- **Anthem BlueCross BlueShield**
- **UnitedHealthcare**
- **Aetna**
Oncology Care Model:
The US Oncology Network Experience
Participating and Performing in OCM

<table>
<thead>
<tr>
<th>Participation</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet program requirements</td>
<td>Streamline operations</td>
</tr>
<tr>
<td>• Practice transformation</td>
<td>• Reduce cost of care</td>
</tr>
<tr>
<td>• Practice redesign activities</td>
<td>o Hospitalizations</td>
</tr>
<tr>
<td>• OCM beneficiary identification</td>
<td>o ED utilization</td>
</tr>
<tr>
<td>• Monthly billing management</td>
<td>o Drugs, ancillary services</td>
</tr>
<tr>
<td>• Data submission</td>
<td>• Technology enhancements</td>
</tr>
<tr>
<td>o Quality measures</td>
<td>• Pathways adherence</td>
</tr>
<tr>
<td>o Staging/clinical data</td>
<td>• Establish key workflows (e.g. navigation)</td>
</tr>
<tr>
<td></td>
<td>• Performance-based payment achievement</td>
</tr>
</tbody>
</table>
What Providers Are Thinking About When Making Treatment Decisions

• Increased use of pathways and evidence-based medicine
  o Emphasis on efficacy, toxicity and cost (including patient out-of-pocket)
• Drugs on pathways vs. off-pathways are preferred
• Advance care planning
• Involvement of patient navigator and emphasis on care management throughout the continuum of care
Do Pathways Create Value?
Clear Value Plus technology brings relevant information to the point of care

**Clear Value Plus℠**
- Flexible access to leading content:
  - NCCN Guidelines®
  - Value Pathways powered by NCCN™
  - Institution-specific or payer-specific
- Integrates with leading EHRs
- Includes financial information
- Real-time reporting on compliance, performance and outcomes
Introduction of a Decision Support Tool and Pathways Compliance

<table>
<thead>
<tr>
<th></th>
<th>Pre-CVP (9/14)</th>
<th>CVP (9/15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-pathway</td>
<td>1607</td>
<td>2091</td>
</tr>
<tr>
<td>Off-pathway</td>
<td>452</td>
<td>239</td>
</tr>
<tr>
<td>Total</td>
<td>2059</td>
<td>2330</td>
</tr>
<tr>
<td>% on pathway</td>
<td>78%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Wilfong, et. al., J Clin Oncol 34, 2016 (suppl 7S; abstr 187)
A Disease Management Pilot Program in a Medicare-Age Population with Cancer: 2-Year Results

Neubauer, M; Hoverman, JR; Jameson, M; Hayes, J; Abdullahpour, M; Haydon, W; Sipala, M; Supraner, A; Kolodziej, M; and Verrilli, D.

Proceedings ASCO Annual Meeting 2016, abstract 6505
Pilot Concept

• Collaboration between:
  o Aetna
  o Innovent Oncology
  o Texas Oncology

• Supported by:
  o Per member per month (PMPM) fee
  o Potential for program shared savings
Program Metrics

• Shared savings based on:
  o Claims cost for drugs (IV chemotherapy and supportive care drugs)
  o Inpatient days (per member per treatment month)
  o ER visits (per member per treatment month)

• Quality measures (not all inclusive):
  o Adherence to Value Pathways by NCCN
  o Hospice utilization
  o Patient satisfaction
Results: Metrics

- Enrolled Innovent patients: n=415 over two years
- Deceased patients during study:  n=94

<table>
<thead>
<tr>
<th>Metric</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathway Adherence (goals: Y1, 78%; Y2, 81%)</td>
<td>81%</td>
<td>84%</td>
</tr>
<tr>
<td>Patient Satisfaction (goals: Y1, 80%; Y2, 85%)</td>
<td>94%</td>
<td>93%</td>
</tr>
<tr>
<td>Hospice Enrollment* (goals: Y1, 50%; Y2 55%)</td>
<td>55%</td>
<td>57%</td>
</tr>
</tbody>
</table>

*As a % of deceased patients
Results: Savings

- Percent cost savings, control vs. Innovent cohort

<table>
<thead>
<tr>
<th></th>
<th>Chemotherapy and Supportive Care</th>
<th>Inpatient</th>
<th>ER</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark Cost</td>
<td>$11,926,588</td>
<td>$4,150,803</td>
<td>$330,724</td>
<td>$16,408,115</td>
</tr>
<tr>
<td>Actual Cost</td>
<td>$9,507,239</td>
<td>$3,550,114</td>
<td>$308,907</td>
<td>$13,366,260</td>
</tr>
<tr>
<td>Savings Percent</td>
<td>20.29%</td>
<td>14.47%</td>
<td>6.60%</td>
<td>18.54%</td>
</tr>
</tbody>
</table>
Conclusions

• Quality, performance, and resource consumption will be measured for all Medicare providers [MIPS, Advanced Alternative Payment Models (APMs)]

• The value of drugs and technology will be scrutinized much more carefully by providers

• Adherence to clinical pathways remains a cornerstone for value-based care

• Successful practices will learn how to transform to meet VBC program requirements, provide enhanced services, and negotiate agreements with payers that support these aligned incentives
Clinical Pathways: With What Result?

Experience with Radiation Oncology Pathways
Constantine Mantz MD
Chief Medical Officer
21st Century Oncology
Basic Considerations: Clinical Pathways

Clinical pathways are an application of the process management paradigm to clinical decision-making and healthcare delivery.

• elements
  – resource-based view of best practices
  – prescriptive in function
  – variance identification and remediation

• challenges
  – narrow by design: all pertinent care variables are not captured
  – update burden: new treatments not quickly integrated
  – operational burden: integration into clinical workflows at the point of care creates inefficiency
  – poor optics among end users: restrict clinical flexibility
Basic Considerations: Clinical Guidelines

Clinical guidelines are best practice consensus statements – more ‘textbook’ and less ‘process’.

• elements
  – array of carepaths and clinical options tiered according to evidence level, efficacy, toxicity and (sometimes) cost

• challenges
  – limited utility as an instrument to measure quality and cost
  – update burden: new treatments not quickly integrated
  – determinations made on the basis of a sliding scale of evidence and opinion
Can Clinical Pathways Be a Value Framework?

**hypothesis:** Pathways reduce direct medical costs by restricting unnecessary and costly treatments and reduce long-term, indirect medical costs by improving patient outcomes in oncology.

- some but little evidence to accept or reject
- study limitations
  - selection bias: off- and on-pathway patients may differ with respect to characteristics that impact outcomes
  - temporal bias: pre- and post-types of studies do not account for changes in practice over time
  - ascertainment bias: available data between off- and on-pathway patients may vary
Use of Pathways in Radiation Oncology

pathways limited to specific cost variables

“end-to-end” stand-alone pathways

integrated pathway and payment systems
Pathways Limited to Specific Cost Variables

BCBS MA experience

• Insurer formed a consensus group of 11 MA-based radiation oncologists to pilot an evidence-based authorization protocol for IMRT, a sophisticated radiotherapy more costly than conventional radiotherapy.
• Protocol allowed for specified diagnoses to be approved automatically and all other diagnoses to be subject to peer-to-peer discussion with same radiation oncologists.
• Cost, outcomes and QOL were not assessed – only IMRT utilization.

Pathways Limited to Specific Cost Variables

BCBS MA experience

Figure 1. Blue Cross Blue Shield of Massachusetts use rates of intensity-modulated radiation therapy (IMRT) and external beam radiation therapy (EBRT) after implementation of IMRT volumetric guidelines in encounters per 1,000 members before and after guidelines were established.

End-To-End Pathways

Via Oncology/UPMC experience

• Via Oncology, an oncology pathways provider and a for-profit subsidiary of UPMC, provides a web-based clinical decision support tool to UPMC’s 20 radiation oncology facilities.
• Physicians use tool to determine on- or off-pathway status of treatment decisions for each cancer patient. Off-pathway decision require a medical director’s peer review and approval.
• UPMC reported on the impact of the clinical pathway upon the adoption of breast radiotherapy hypofractionation (ie, use of fewer radiation treatments for selected patients) across its network.

Rajagopalan. Prac Radiat Oncol 5: 63. 2015
End-To-End Pathways

Via Oncology/UPMC experience

Rajagopalan. Prac Radiat Oncol 5: 63. 2015
Integrated Pathway and Payment Systems

21st Century Oncology experience

• 21C is a services provider of > 900 physicians in 22 states.
• In 2011, 21C executed the first episodic payment program in radiation oncology with a national insurer.
• Separate episode payments are made for each high-volume diagnosis group and are determined by calculating the costs of each clinically valid carepath per diagnosis group (eg, breast cancer).
  – The episode price is then the weighted average of the costs of all carepaths for a given diagnosis.
  – Weighting is determined by expected carepath utilization.
• Net effect: clinical decision are decoupled from payment, and changes in resource utilization are accounted for in the next period’s pricing.
Integrated Pathway and Payment Systems

Hypofractionation for Early-Stage Breast Cancer
21C Integrated Pathway-Payment Program

Figure 2. Hypofractionated Whole Breast Irradiation After Breast Conserving Surgery Among Patients With Early-Stage Breast Cancer in 14 Commercial Health Plans, 2008 to 2013
Alternative Payment Models and the Role of Pathways

- Dr. Andrew Hertler
  Chief Medical Officer
  New Century Health
Clinical Pathway Focal Points

• Pathways Adoption Landscape

• Essential Components of Alternative Payment Models and Risk Management

• Integration of Clinical and Financial Data for Effective Value-Based Care Delivery
Current Forces Driving Pathway Adoption

Oncologists’ Use of Cancer Treatment Guidelines and Pathways

<table>
<thead>
<tr>
<th>Current use</th>
<th>Planned for 2016</th>
<th>Do not use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidelines</td>
<td>28.7%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Pathways</td>
<td>38.0%</td>
<td>49.3%</td>
</tr>
</tbody>
</table>

Enforcement of practices’ use of guidelines or pathways

<table>
<thead>
<tr>
<th>Enrollment Type</th>
<th>Guidelines</th>
<th>Pathways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of oncologists (n=127)</td>
<td>Percentage of oncologists (n=101)</td>
<td></td>
</tr>
<tr>
<td>Not enforced</td>
<td>29.9%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Discussion during tumor boards</td>
<td>33.1%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Physician group payment tied to compliance</td>
<td>18.9%</td>
<td>22.8%</td>
</tr>
<tr>
<td>Reports on compliance shared with peers</td>
<td>16.5%</td>
<td>24.8%</td>
</tr>
<tr>
<td>Physician individual payment tied to compliance</td>
<td>11.0%</td>
<td>11.9%</td>
</tr>
<tr>
<td>IT system’s stop edit requires approval on exceptions</td>
<td>4.7%</td>
<td>4.0%</td>
</tr>
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</table>
Clinical Pathway Selection and Reporting Tools Are Essential For Enabling Practices to Balance Quality Care and Financial Risk Exposure

Oncology Care Model Goal

“… to utilize appropriately aligned financial incentives to enable improved care coordination, appropriateness of care, and access to care for beneficiaries undergoing chemotherapy.”

Practice Requirements

- Reimbursement Models That Sustain Practice Viability
- Clinical Tools That Facilitate High Value Therapy
- Reporting Tools That Document High Value Care

2017 Cancer Center Business Summit
Key Roles of Pathways

1. Guides Providers to Value
   • Most efficacious, least toxic and most cost-effective therapies

2. Provides Standardization
   • Creates efficiency
   • Starts continuous improvement cycle

3. Documents Quality Care for Patients
   • Evidence-based therapies

4. Generates Population Health Management Data
   • Cost benchmarking
   • Highlights different practice options for creating value
Evidence Based Pathways Guide Providers to Value

- Compendia (NCCN)
- Level 2 Pathways
- ASCO/ASH (Choose Wisely)
- Practicing Physicians
- SAB* (*Scientific Advisory Board)

Level 1 Preferred Pathways

Evidence Based Clinical Guidelines

Financial Value

Preferred Pathways
W. Edwards Deming’s Philosophy Can Inform The Value-Based Transition Process as Practices Embrace Alternative Payment Models and Pathways

**Understand Process Variation**
- Reduction in variation improves quality
- Focus on special causes
- Common causes can be reduced by changes in technology

**Leverage Knowledge**
- Management decisions should be driven by
  - Facts
  - Data
- Don’t follow management fads!
"First, physicians and other providers say that capitation has inserted economic considerations into their provision of care. They say they are sometimes aware that they can save money by withholding care or providing less expensive care (for example, substituting a generic drug for a name-brand pharmaceutical), and this creates an inherent conflict of interest.”

Mark Hagland in FRONTLINE
“How Does Your Doctor Get Paid? The Controversy Over Capitation”
Pathways Generate Population Health Management Data: Benchmarking Practice Patterns of Care Drives Change

% of Metastatic Chemotherapy Patients on Neulasta

NCH Benchmark
The Next Generation of Clinical Decision Support Tools Provide Data Visibility to Care Delivery Partners

- Pathway compliance & quality metrics
- Cost-of-care reporting
- Approved requests
- Supporting documentation
- Patient-specific clinical and therapeutic data
- Requested facilities & services
- Preferred referral & service management
- Key performance measure reporting
Discussion