The Business of Medical Oncology:
Knowledge Transfer of Observed Best Practices and Opportunities

Virginia Association of Hematologists and Oncologists

Fall Membership Conference
Charlottesville, Virginia
October 24, 2014

Prepared by:
Kelley D. Simpson, Senior Partner
Tracey Samdahl, Senior Consultant
Contents

- Who is Oncology Solutions?
  - Industry Trends Shaping Oncology Care Delivery
  - Observed Best Practices
  - Discussion / Q&A
Innovative oncology consulting services throughout the country based on data-driven business, financial and clinical program strategies

Illuminating the path **forward**.

- 41 years of cancer business leadership
- 1,800 successful client engagements
- 180 cancer facility planning projects
- 73 percent repeat clientele
- 20+ dedicated consulting staff
- 3 Partners with 80+ combined years of experience
- Active Board and Committee national involvement with the ACCC, ACE, CCBS

AMC, NCI, health system, community hospital and oncology practice **know-how**.
As the nation's largest independent cancer consulting firm, Oncology Solutions is focused on cancer program planning, development and real-time implementation.

**Experience.**
- Strategic and business planning
- Hospital-physician strategies
- Clinical program development
- Facility and technology planning
- Revenue cycle and operations
- Oncology IT planning

**Engagement.**
- Experts in complex oncology physician-hospital relationships
- Well-versed with diverse health-system stakeholders
- Long-term relationships & ongoing collaboration with clients

**Expertise.**
- Integrated, in-house expertise exclusively in oncology
- Actively involved with industry groups and thought-leadership
- Involved in development of national guidelines and best practices

**Continuity.**
- Full range of services from visioning through implementation
- Robust in-house resources to meet project needs
- Long-term client relationships
- Ongoing team collaboration

Oncology Solutions advantage.
Contents

- Who is Oncology Solutions?
- Industry Trends Shaping Oncology Care Delivery
- Observed Best Practices
- Discussion / Q&A
Cancer incidence expected to double by 2050 coupled with exponential growth of cancer survivors is burdening cancer care providers

1.67M

Number of new cancer cases diagnosed in the U.S. in 2014

8.5x ≈ 14M

Number of people living with cancer per new case

- During the last 40 years, annual NCC increased 80% and cancer survivors increased 280%
- 1 out of 2 men and 1 out of 3 women will receive a cancer diagnosis in their lifetimes

2014 Incidence Heat Map

<table>
<thead>
<tr>
<th>Incidence (per 1000)</th>
<th>3.7-4.3</th>
<th>4.4-5.1</th>
<th>5.2-5.3</th>
<th>5.4 - 6.3</th>
</tr>
</thead>
</table>

National cancer incidence, at 5.3 per 1,000 people, has remained relatively flat since the early 1990s

Virginia has an incidence rate of 4.9 per 1,000
- 40,970 new cancer cases in VA
- 112 diagnosed daily in VA
- 348,245 patients living with cancer

2014 Incidence Heat Map

Source: SEER Cancer Statistics 1975-2008; Census Bureau; Behavioral Risk Factor Surveillance (BRFSS); CDC

3.6 ≈ 4 per 1,000

Incidence (per 1000)

2014: 1.65
2008: 1.4
1995: 1.3
1985: 1.1
1975: 0.9

Living with Cancer (Millions)

2013: 14.0
2008: 12.0
1995: 8.2
1985: 5.5
1975: 3.6

National cancer incidence, at 5.3 per 1,000 people, has remained relatively flat since the early 1990s
The demand for oncologists will far exceed the supply. By 2020, a shortage of up to 3,200 medical oncologists is predicted to provide care to a growing cancer population.

54% Practicing oncologists are aged 50+ and will be 65+ by 2020

10x deficit Growth in cancers requiring radiation growing by 22%, while supply of radiation oncologists growing by only 2%

Conclusions from ASCO’s Workforce Strategic Plan 2008-2013

1. The demographics of the oncologist workforce are changing significantly with more than half of practicing oncologists nearing retirement. Younger oncologists increasingly desire flexible work options in support of greater work-life balance.
2. The pipeline for new oncologists is severely constrained by the limited interest in Internal Medicine training, competition among Internal Medicine subspecialties for the pool of residents, and very limited plans to increase oncology fellowship slots.
3. The oncologist workforce shortage coupled with shortages in other health professions presents a challenge to the entire oncology care team.
4. The challenge of the workforce shortage requires a multi-faceted approach because no single effort will come close to addressing the significant imbalance between expected demand and projected capacity to deliver oncology care.

Source: March 2007 Forecasting the Supply of and Demand for Oncologists: A Report to the American Society for Clinical Oncology (ASCO) from the AAMC Center for Workforce Studies; AMA Masterfile
Total cost of cancer care is on the rise, making it increasingly difficult to maintain affordability for small to medium size medical oncology practices.

$158B
Total cost of cancer care in the US by 2020

Cancer Drug Spending
Is expected to grow by ~20% through 2014

30%
Medicare reimbursement cut would be necessary to meet SGR guidelines

Monthly and Median Costs of Cancer Drugs at the Time of FDA Approval 1965-2013

http://www.mskcc.org/research/health-policy-outcomes/cost-drugs
Declining reimbursement is one of the greatest challenges to oncology practice sustainability

1,338 Clinics/practices impacted by:
- 288 clinics closed
- 407 struggling financially
- 43 sending pts elsewhere
- 469 with hospital agmts or purchased by hospitals
- 131 merged or acquired

2015 Proposed CMS Reimbursement

SGR Fix
- 21% reduction to the conversion factor beginning January 2015; Congress will likely step in again to halt these cuts
- +1% Medical oncology slated for a slight increase

Drugs will continue to be reimbursed at ASP+6%

≈2% Increase in hospital payments assuming proper reporting of quality metrics

-8% Proposed 2015 fee schedule decline for freestanding and hospital technical radiation therapy services
Value-based cancer care is NOW. Within the next 3 years, all cancer care providers will be participating in some form of risk contracting.

Converging market factors are launching a ‘new day’ in cancer care payer relations

“Payers are no longer ‘afraid’ to manage cancer treatments and most payers now actively engage in the management of this complex disease.”

Dr. John Fox, MHA
AVP of Medical Affairs, Priority Health

“payer approaches to cancer care will continue to evolve”
“new reimbursement methodologies will continue to be explored”
“there will be limitations to patient access to some types of care”
“comparative and cost effectiveness of treatments will be considered”

4th Annual Conference of the Association for Value Based Cancer Care
John Fox, MHA Session: “Changing Access and Payer Challenges in Oncology—Medicare and Commercial”
A recent report from the Institute of Medicine suggests growth may be outstripping our capabilities in cancer treatment.

Institute of Medicine Report

**Delivering High-Quality Cancer Care:**

*Charting a New Course for a System in Crisis*

Report Released September 10, 2013

- **How do we meet growing demand for cancer services...**
  - Aging population and increasing cancer incidence
  - Rapidly increasing number of cancer survivors

- **...Within a fragmented eco-system...**
  - Diminishing workforce
  - Ill-defined quality measures
  - Rising costs/reduced margins
  - Treatment futility/No comparative effectiveness
  - Poor clinician-patient communication
  - Inadequate IT infrastructure

- **...Using a novel framework and foreign vocabulary?**
  - Accountable Care Organizations
  - ASCO Medical Oncology Bundles
  - Value-Based Modifiers
  - Clinically Integrated Networks
  - Oncology Medical Home
  - Survivorship Plans
  - Research Cooperatives
  - Pathway Compliance

Source: “Delivering High-Quality Cancer Care...” Institute of Medicine. 10 Sept. 2013
Industry Solution: an eco-system made sustainable through patient-centered, “value-based” principles & infrastructure

**Growing Reality**

- Real-time quality and cost reporting, empowering consumers to make informed treatment decisions

**Major Gaps**

- Incentive alignment
- Evidence-based payments
- Collaborative reporting
- Data accessibility
- Consensus on quality

**Patient Centered Cancer Care**

**Roadmap for Sustainability**

- **Patient-centered approach**
  - Supporting program infrastructure
    - Multidisciplinary physician teams
    - Evidence-based clinical pathways
    - Provider alignment
  - Service-line leadership (clinical and administrative)
  - Cost transparency/containment
  - Data-driven program management and clinical decision making
  - Full compliment of supportive care services
  - Metrics to track and improve upon processes, outcomes and value
Contents

- Who is Oncology Solutions?
- Industry Trends Shaping Oncology Care Delivery
- Observed Best Practices
- Discussion / Q&A
BEST PRACTICE #1: Establish Medical Oncology Practice Dashboard

Include essential elements to consistently monitor and manage the business on an ongoing basis

<table>
<thead>
<tr>
<th>Staffing</th>
<th>Productivity</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Oncologists</td>
<td>Office New Consults</td>
<td>Collections</td>
</tr>
<tr>
<td>Business Days</td>
<td>Office Visits</td>
<td>E&amp;M/Administration</td>
</tr>
<tr>
<td>Front Office Staff</td>
<td>Hospital New Consults</td>
<td>Drugs</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>Hospital Visits</td>
<td>Lab</td>
</tr>
<tr>
<td>Lab Techs/MAs</td>
<td>Hospital Admissions</td>
<td>Procedures &amp; Other</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>Hospital Discharges</td>
<td></td>
</tr>
<tr>
<td>Physician Extenders</td>
<td>Initial Hydration</td>
<td>Charges</td>
</tr>
<tr>
<td>PharmD/Pharm Techs</td>
<td>Initial IV Infusion</td>
<td>COGS</td>
</tr>
<tr>
<td>FTE Front Office</td>
<td>Initial Chemo Push</td>
<td>Gross Profit</td>
</tr>
<tr>
<td>FTE MA</td>
<td>Initial Chemo Hr</td>
<td></td>
</tr>
<tr>
<td>FTE Lab Tech/MA</td>
<td></td>
<td>Costs</td>
</tr>
<tr>
<td>FTE Registered Nurse</td>
<td></td>
<td>Labor</td>
</tr>
<tr>
<td>FTE Physician Extender</td>
<td></td>
<td>Lab</td>
</tr>
<tr>
<td>FTE PharmD/Pharm Techs</td>
<td></td>
<td>Medical Supplies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Office/Utilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Office Supplies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practice Overhead</td>
</tr>
</tbody>
</table>

- Total Cost
- Profit/(Loss)
- Inventory
**BEST PRACTICE #2: Conduct Real-time Statistical and Financial Benchmarking**
Ensures timely reporting to physicians and ensures practice agility for making actionable decisions

### Monthly Practice Profiling

| 1. New and established patients visits per MA |
| 2. New and established patients visits per front office staff |
| 3. Total infusions per RN and PharmD/Tech |
| 4. Total production per total FTEs |
| 5. Number and percentage mix of hematology vs. oncology consults |
| 6. Cancer encounters as a percentage of total actual office activity |
| 7. Cancer encounters as a percentage of total actual office activity |

### Monthly Staffing Benchmarks

| 1. Total staffing per FTE medical oncologist |
| 2. Total staffing per FTE provider (med oncs + APPs) |
| 3. MA/Lab staff per provider |
| 4. RN/Rx staff per provider |
| 5. Front office staff per provider |
| 6. Gross profit per FTE |
| 7. Income before MD Expense per FTE |

### Daily & Monthly MD and APP Production Benchmarks

| 1. Office and hospital new patients |
| 2. Office and hospital visits |
| 3. Initial Hydration |
| 4. Initial IV Infusion |
| 5. Initial Chemo Push |
| 6. Initial Chemo Hr |
| 7. Total production generated per MD and by APP |

### Monthly Financial Profiling

| 1. Net total charges per provider |
| 2. Net chemo charges per provider |
| 3. Gross profit per provider |
| 4. Income before MD expense per provider |

**Cost per MD and Total providers for:**
- ✓ Labor
- ✓ Office/Utilities
- ✓ Lab
- ✓ Office Supplies
- ✓ Med Supplies
- ✓ Indirects

| 2. Total Cost per MD and Total Providers |
| 3. Profit/(Loss) per MD and Total Providers |

### Monthly Financial Profiling

| 1. Consults by Payer |
| 2. Payer Mix by Encounter |

| 1. A/R days sales outstanding |
| 2. A/R days sales outstanding by payer |
| 3. Patient payments as % of total |
| 4. Co-pays collected as % of co-pays due |
| 5. % of A/R > 90 days |

| 1. PQRS monitoring |
| 2. Meaningful use monitoring |
| 3. Compliance metrics by payer for risk contracts |
BEST PRACTICE #3: Develop a 3-Year Strategic Plan and Modify to Adapt Real-Time (1 of 2)
Provide a consistent, single message for the practice and proactively manage your future

**PHASE 1**
Program Situational Assessment

**Focus**
- What is the current state?

**Objectives**
- Preview market and financial performance
- Discuss qualitative dynamics

**Deliverables**
- Environmental assessment
- Financial performance snapshot
- Practice profiling

**PHASE 2**
Vision, Guiding Principles & Direction

**Focus**
- Where do we want to go?

**Objectives**
- Agree on current state
- Develop guiding principles
- Preview future state options

**Deliverables**
- Strategic options
- Identification of potential impediments and/or challenges
- Mission and vision statement for the practice

**PHASE 3**
Strategies Development

**Focus**
- How do we achieve our goals?

**Objectives**
- Agree on preferred future state for the practice
- Outline 3 year measure for success

**Deliverables**
- Strategies and tactics to elevate the practice within the market, region and/or nationally

**PHASE 4**
Implications Analysis

**Focus**
- What are the resource requirements and timeline?

**Objectives**
- Prioritize practice development activities
- Define next steps, roles and responsibilities and timing

**Deliverables**
- High level implementation plan/timeline
- Modify as key environmental changes occur
BEST PRACTICE #3: Develop a 3-Year Strategic Plan and Modify to Adapt Real-Time (2 of 2)
Consider a range of practice characteristics, goals and customer needs when developing the plan

- **Practice Philosophy**
  - Ideal time spent with patients?
  - Balance of work vs quality of life?
  - Size of the practice, i.e., open to growth or managed size?
  - Single or multiple locations?

- **Compensation Model**
  - Total production?
  - Equal split?
  - Combination of equal base salary with production parameters and incentive pay?
  - Incentive plans for non-physician staff?

- **Business Model**
  - Accept all payers? Blend of accepted payers and others to be referred to hospital infusion centers?
  - Open to partnerships with hospitals/health systems? Other practices? Other businesses? Affiliations?
  - Open to mergers or acquisitions?

- **Staffing Complement**
  - CEO vs. business manager?
  - Medical leadership model?
  - Use of mid-levels? Number of mid-levels per physician?
  - Lab, MAs, front and back office, supportive care?
  - Level of financial counseling and patient assistance?
  - Physician succession planning?

- **Care Delivery**
  - Ideal hematology-oncology mix?
  - Ideal tumor site case mix? Any sub-specialization?
  - Total care coordination structure or structured triage model?
  - Adoption of pathways with physician compliance guidelines?
  - Level of pursuit of clinical research?
  - Level of supportive care adoption?

- **Market Presence**
  - Metro, rural or both?
  - Only local or regional and possibly national?
  - Alignment strategy?
  - Market share goals? What can be achieved?

- **IT Infrastructure**
  - Level of adoption?
  - Appetite for resource allocation?
  - Cloud-based vs internal build?
  - EMR and PMS selection and maintenance?

- **Marketing and Promotion**
  - To referring physicians?
  - To patients?
  - To payers and employers?
BEST PRACTICE #4: Develop Standardized, Evidence-Based Pathways by Tumor Site
Proactively positions for contracting opportunities and allows for improved cost mgmt/containment

Define

- **Clinical Guidelines** are designed to include all available options within reason for the presentation of disease being discussed.

- **Clinical Pathways** are designed to add additional layers of scrutiny to available treatment options for a specific presentation of disease to further standardize treatment patterns.

What?

- **Clinical pathways** are detailed, evidence-based processes reviewed and adopted by a practice to guide delivery of cancer care for specific patient presentations, including the state and stage of disease.

- **Supportive care pathways** provide more effective management of diagnostic approach, urgent care needs, end-of-life care and survivorship plans.

Why?

- Reduces variability and improves outcomes
- Serves as a framework for responding to payers
- Provides greater certainty of cost for the practice, patients and payers
- Enhances diagnostic work-up and treatment planning considering rapid adoption of genetics applications
- Offers better management of ER visits, readmissions and end-of-life care
- Reduces errors
- Minimizes off-label drug use, improving finances
- Captures real-time measures and offers a reporting format for competitive, marketing opportunities
- Positions the practice for risk-reward contracting opportunities
BEST PRACTICE #5: Invest in IT, Revenue Cycle and Maintain PI Philosophy
Value-based cancer care requires strong IT presence with timely reporting of clinical and business information

- **Inventory Management** automated and interfaced with PMS striving for turnover every 3-5 days

- **Highly Skilled Front Office** essential for accurate and well documented registration, insurance verification and pre-certs

- **Financial Advocates** a must to assess patient financial status, regimen approval, pre-certs, aid in assistance programs

- **Charge Capture** with dispensing interfaced to PMS, EHR and lab interfaced to PMS goal of 100% charge capture

- **Physician Real-time Data Entry** of diagnostic codes and clinical documentation to assist coders and revenue cycle staff with timely billing

- **Collection** at time of visit is best practice and a firm collections policy is essential

- **Denials** should be worked completely and thoroughly and utilize physician input with payers, as needed

- **Participation** with programs such as QOPI, PQRS and others should be established to provide reporting of quality metrics to payers, patients and referring physicians

- **Staff Training** on an ongoing basis elevates coding and billing staff to specialists

- **Customer Satisfaction** should be measured on an ongoing basis with patients and referring physicians and utilized for PI activities
BEST PRACTICE #6: Prepare for the Future and Remain Open to Opportunities (1 of 3)

The autonomous nature of medical oncologists sometimes closes the door to alignment opportunities that could enhance practice sustainability.

![Diagram showing current level of adoption and difficulty for various oncology services and arrangements.](chart.png)

- **Oncology Service Line Co-Management**
- **Oncology Medical Home**
- **Technical Mgmt Svcs LLC**
- **Oncology MSO**
- **Physician Employment**
- **Medical Directorships**
- **Professional Services Agreement (PSA)**
- **Oncology Super Groups**
- **Asset LLC**

**Current Level of Difficulty**

**Current Level of Adoption**
BEST PRACTICE #6: Prepare for the Future and Remain Open to Opportunities
Co-management agreements foster greater programmatic alignment with hospital partners

- Capitalized by investing participants
- Initial start up and ongoing operating costs paid proportionate to ownership

Engage parties as business and clinical partners for managing, overseeing and improving service line quality and efficiency
BEST PRACTICE #6: Prepare for the Future and Remain Open to Opportunities

Professional Service Agreements provide independence, while stabilizing financial position

- Physicians paid FMV per WRVU for medical oncology professional services and oversight of provider-based chemotherapy department
- Hospital leases space and runs program as a provider-based outpatient department
- Practice remains intact and autonomous

Diagram:

- Medical group bills and collects for all professional fees
- Hospital bills and collects for all technical fees in OP department
- Physicians paid FMV per WRVU for medical oncology professional services and oversight of provider-based chemotherapy department
- Hospital leases space and runs program as a provider-based outpatient department
- Practice remains intact and autonomous
The Professional Services Agreement provides a value to physicians, patients and hospitals as it standardizes the care environment.

**Value to Physicians:**
- Reduced exposure to reimbursement fluctuations
- Elimination of drug inventory/cash flow liabilities
- Increased patient care time

**Value to Patients:**
- Single treatment environment
- Improved care coordination
- Increased clinical efficiency

**Value to Hospital:**
- Coordinated oncology services
- New revenue source
- Captive referral source for downstream services

---

**Economics of a Medical Oncology PSA**

- Practice Medicare Revenue + Practice Non-Medicare Revenue - (Practice Drug Expenses) - (Practice Operational Expenses) = Practice Net Income
- Hospital Medicare Revenue + Hospital Non-Medicare Revenue - (Hospital Drug Expenses) - (Hospital Operational Expenses) = Hospital Net Income

BREAKEVEN TO SLIGHT LOSS
SLIGHTLY TO MUCH BETTER (250-300% vs. 125% of MCR)
SLIGHTLY LESS
SLIGHTLY WORSE
MUCH BETTER
Discussion / Q&A

Prepared by:

Kelley D. Simpson
Senior Partner
ksimpson@oncologysolutions.com

Tracey Samdahl
Senior Consultant
tsamdahl@oncologysolutions.com