The Cost of Cancer and the Role of the Oncology Pharmacist

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Objectives

1. Describe the benefits and barriers of utilizing a dose-rounding policy for chemotherapy/biotherapy.
2. Discuss payments options for high-cost drugs and their implication on the role of the oncology pharmacist.

Background

- Spending on cancer medicine 2017
  - Global $133 billion
  - United States $49.8 billion
  - Doubled since 2012
  - 2/3rd of growth was from drugs approved in the past 5 years

- 2018: 40 new drug approvals or new indications by the FDA
  - Increased growth of targeted agents and use of biomarkers
- Median annual cost of newly approved therapy in 2017 = $150,000
  - Median annual cost in 2013 = $79,000
- Continued advancements are expected to continue to drive growth and increase costs

Disclosures

- I have no financial or relevant disclosures in regards to this presentation.
Cost Savings Initiatives

- **Dose-Rounding Policies:** various versions have been reported in the literature
  - Cytotoxic and/or biotherapy
    - All-inclusive or specific agents
  - Rounding prescribed dose +/- 5 – 10%
    - To nearest vial size
    - To nearest dosing increment
  - Based on intent of chemotherapy
  - Exemptions: research medications, pharmacokinetically determined doses

Dose-Rounding Policy

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Barriers</th>
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<tbody>
<tr>
<td>• Cost savings</td>
<td>• Time constraints based on work load</td>
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<td>- Estimated $40,000 - $200,000+</td>
<td>• Complicated policies</td>
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<tr>
<td>• Medication safety</td>
<td>• Hesitancy to implement such policies</td>
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<tr>
<td>• Reduction in drug waste</td>
<td>• Theoretical harm of increased toxicity and</td>
</tr>
<tr>
<td></td>
<td>decreased efficacy</td>
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Requires analysis of institution and creation of individualized policy to have most benefit

Financial toxicity

- Patient-level impact of cost and its potential side effect just like any other “toxicity” that can result from treatment
  - Cancer patients have 2.5 times higher risk of filing bankruptcy
  - Can have negative impact on adherence
- NorthShore University Health System addressed financial toxicity (FTOX) at patient education during informed consent
  - Information increased about risk of FTOX 0% - 53%
  - Obtained prior authorization prior to therapy 50% - 94%

Payment for High Cost Drugs

- **Prescription coverage**
  - Tiered formulary of medication
  - Deferment of specific medications to specialty pharmacy
- **Medicare Coverage**
  - Part B – outpatient chemotherapy administration and some oral chemotherapy agents, anti-emetics, ESA’s
  - Part D – majority oral chemotherapy agents

Payment for High Cost Drugs

- **Manufacturer Co-Pay Cards**
  - Allows payment secondary to a private insurance company
  - **NOT eligible with federal insurance options**
    - Medicare, Medicaid, TriCare, Veterans Affairs, Department of Defense, Medigap, CHAMPUS
  - BMS: maximum $25,000 per drug per year
    - $25 co-pay per dose
    - Novartis: maximum $15,000 per year
    - No more than $25 per month
  - Requires additional financial paperwork for assessment of eligibility

- **340B Program**
  - Allows for covered entities to purchase outpatient drugs at reduced prices from manufacturers
  - Changes to Medicare re-imbursement January 2018
- **Affordable Care Act**
  - Shift towards quality-based care
Cost Savings Initiatives

- Center for Medicare & Medicaid Innovation (CMMI) and the Oncology Care Model (OCM)
  - Improve health outcomes for patients with cancer, improve quality of cancer care, and reduce spending for cancer treatment
  - 24/7 access to oncology care for patients
  - Effective use of electronic medical record
  - Continuous quality improvement
  - Patient navigation
  - Comprehensive care plans
  - Treatment according to evidence-based, national guidelines

Oncology Care Model

- Focusing on incentives to improve quality of care
- Provides enhanced services for patients undergoing chemotherapy treatment in 6-month episodes

  - Payment
    - Monthly per-beneficiary-per-month (PBPM) payment for the duration of the episode of care
    - $160 payment per month per beneficiary
    - Performance-based payment for associated episodes of cancer care
    - Retrospective payments based on Medicare's historical expenditures and achievement of quality measures

Cost Savings Initiatives

- American Society of Clinical Oncology (ASCO) Value Framework
  - Clinical efficacy endpoints
  - Outcome-based pricing determining drug reimbursement
    - Patient survival beyond median survival in clinical trial provided with higher reimbursement

- National Comprehensive Cancer Networks Evidence Blocks
  - Integrates efficacy, safety, quality and quantity of evidence, consistency of evidence, and affordability

Future Directions

- Oncology Clinical Pathway (OCP): cancer treatment plan used by oncologists and surgeons that includes procedures, tasks, interventions, and treatment regimens (not limited to chemotherapy)

  - ASCO Statement Regarding OCP
    - Recognizing the value an approach to reducing costs
    - Emphasizes the importance of providing ease of use
    - Pathways should support the best and most current evidence
    - Acknowledging that 100% compliance is not possible

  - ASCO assessed 4 Vendors in early 2018
    - Via Oncology, Value Pathways, Anthem/AIMS Cancer Care Quality Program, New Century Health
    - Limited data still exists with cost-savings impact but shows evolving steps to understand this process
    - Non-small cell lung cancer patients – improvement in saving ~$9000 treatment on-pathway but didn’t show improvement in overall survival
Role of an Oncology Pharmacist

• Addressing supportive care medications
  ▫ Large impact on overall spending
  ▫ Generic versus brand options
• Financial toxicity discussions included within chemotherapy education
  ▫ NCCN Distress Thermometer and Problem List
  ▫ Behavioral Risk Factor Survey
  ▫ Comprehensive Cost for Financial Toxicity

Conclusions

• Higher costs of therapy will continue with new drug approvals
• Additional places for pharmacy impact will continue to be present
• Patients should not suffer from financial harm to receive the therapy they need

Audience Assessment Question

2. As the median annual cost of cancer treatment has continued to grow, which adverse effect of cancer treatment listed below should be emphasized during education of cancer options?
   a) Financial toxicity
   b) Myelosuppression
   c) Immune-mediated hepatitis
   d) Nausea

Audience Assessment Question

1. Which of the following best describes a benefit to the utilization of a dose-rounding policy?
   a) Time constraint during a busy shift in the chemo pharmacy
   b) Cost-savings for the institution
   c) Complicated policy with nuisances for individual drugs
   d) Dose-rounding is only useful in cytotoxic agents

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