COST DRIVERS OF CANCER CARE

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Drug pricing is a hot media issue, certainly part of the problem of escalating cancer care costs, but not the main or only driver.

The escalating cost of cancer care is a complex issue.  
- COA has commissioned Milliman to study the cost drivers (targeting early 2016 release).

This presentation is a preliminary look at the drivers of the cost of cancer care.  
- Hopefully, it will provoke discussion and more study.

THREE PRIMARY DRIVERS OF THE COST OF CANCER CARE

Site of Service  
Treatment  
Cancer  
COST OF CANCER CARE
COST DRIVERS OF CANCER CARE OVERVIEW

- Cancer
  - Shifting demographics
- Treatment
  - More lines of appropriate therapy
  - Increased amount of time on active treatment
  - More labs and imaging to determine and monitor treatment
  - Increasing price/cost of drugs
- Site of Service
  - Shifting of treatment to more expensive hospital setting
    - 11 large Medicare exempt cancer hospitals
    - 340B hospitals

CANCER COST DRIVERS: DEMOGRAPHICS

- Tangka 2010: Cancer Treatment Costs in the United States
  - Compared data from the Medical Expenditure Panel Survey (2001-2005) with its predecessor, the National Medical Expenditure Survey (1987)
  - Increase in cost driven mainly by increase in number of cases rather than the cost per treated case
  - Cancer costs doubled over the study period but so did other health costs
  - Cancer costs 4.8% of overall medical expenditures in 1987; 4.90% between 2001-2005
- Mariotto 2010: Projections of the Cost of Cancer 2010-2020
  - Dynamic projection of cost of cancer care
  - 27% increase in costs expected due to US population changes only
    - Independent of incidence, survival, and cost of care per case
  - Model:
    - 2% annual cost increases per case – 39% increase in costs
    - 5% annual cost increases per case – 66% increase in costs
Metastatic Colon Cancer

- Survival
  - Increased from 8 months to 2 years over past two decades
- Drug cost of Mayo regimen of 5-FU/leucovorin for eight weeks — $63
- Newer drugs
  - Irinotecan, oxaliplatin, capecitabine, bevacizumab, cetuximab, panitumimab, regorafenib, aflibercept
- Drug cost of FOLFOX + bevacizumab (6 cycles) — $18,065
TREATMENT COST DRIVERS: TREATMENT INTENSITY

• Not just drug price/cost
• Multiple lines of therapy: what else do we do along the way?
  • Labs, imaging, clinic visits, supportive care, possibility of hospitalization for each line of therapy
    – Maintain quality of life
    – Is it working?
    – Complications of therapy
• Surgical resection of primary site/liver disease
• Stereotactic body radiation
• Chemoembolization
• Radioembolization
• Clinical Trials

TREATMENT COST DRIVERS: DRUG PRICE/COST

Monthly and Median Costs of Cancer Drugs at the Time of FDA Approval 1965-2015

Year of FDA Approval

Source: Peter S. Bach, MD, Memorial Sloan-Kettering Cancer Center
AVERAGE COST OF CANCER TREATMENT BY SERVICE

Source: Internal COA data

SITE OF SERVICE COST DRIVERS: MD VERSUS HOSPITAL CLINICS
SITE OF CARE COST DRIVERS

- Study found “significantly higher per-episode cost for chemotherapy drugs, radiation oncology, imaging (CT, MRI and PET scans) and laboratory services” in outpatient hospitals.

Source: Comparing Episode of Cancer Care Costs in Different Settings: An Actuarial Analysis of Patients Receiving Chemotherapy, Milliman, August 2013
Because Medicare’s payment methodology for PCHs lacks strong incentives for cost containment, it has the potential to result in substantially higher total Medicare expenditures. If, in 2012, PCH beneficiaries had received inpatient and outpatient services at nearby PPS teaching hospitals—and the forgone outpatient adjustments were returned to the Supplementary Medical Insurance Trust Fund—Medicare may have realized annual savings of almost $0.5 billion. Until Medicare pays PCHs to at least, in part, encourage efficiency, Medicare remains at risk for overspending.
“The financial incentive to maximize Medicare revenues through the prescribing of more or more expensive drugs at 340B hospitals also raises concerns… Not only does excess spending on Part B drugs increase the burden on both taxpayers and beneficiaries who finance the program through their premiums, it also has direct financial effects on beneficiaries who are responsible for 20 percent of the Medicare payment for their Part B drugs. Furthermore, this incentive to prescribe these drugs raises potential concerns about the appropriateness of the health care provided to Medicare Part B beneficiaries.”

CONCLUDING REMARKS

- Escalating cost of drug therapy is a major issue and unsustainable
  - Pharma/bio companies need to solve this problem
- However, the cost drivers of cancer care are complex, interrelated, and much more than the drug price
- Dynamics of new therapies, tied to new diagnostics, are driving costs independent of drugs
- Site of care shifts are compounding the costs of component aspects of cancer care, including drugs
- COA commissioning a major study on the cost drivers of cancer care

DISCUSSION & QUESTIONS