



CENTER FOR  
HEALTHCARE  
QUALITY &  
PAYMENT REFORM

**BETTER CARE FOR  
CANCER PATIENTS  
AT LOWER COST:  
How Oncology Practices  
Can Improve Value  
While Remaining Financially Viable**

**Harold D. Miller**  
President and CEO  
Center for Healthcare Quality and Payment Reform

[www.CHQPR.org](http://www.CHQPR.org)

## **PLEASE NOTE:**

I am one of the 11 members of the Federal Physician-Focused Payment Model Technical Advisory Committee (PTAC).

However,  
my comments today reflect my  
*personal* opinions;  
my comments do not represent  
official positions of the PTAC,  
and other PTAC members  
may or may not agree with them.

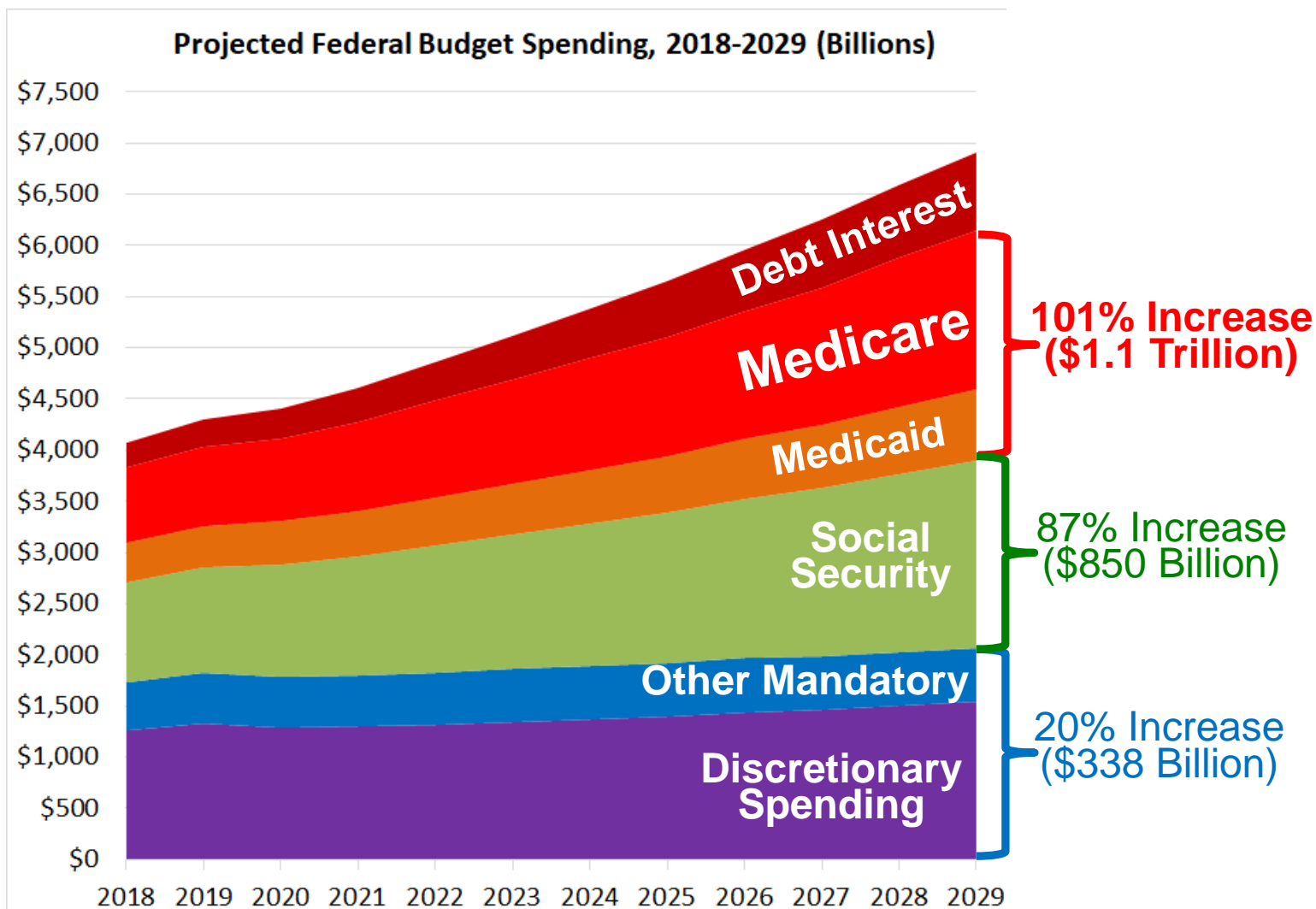
***I Have No Other Disclosures***

# What I Hope You Will Learn From This Presentation

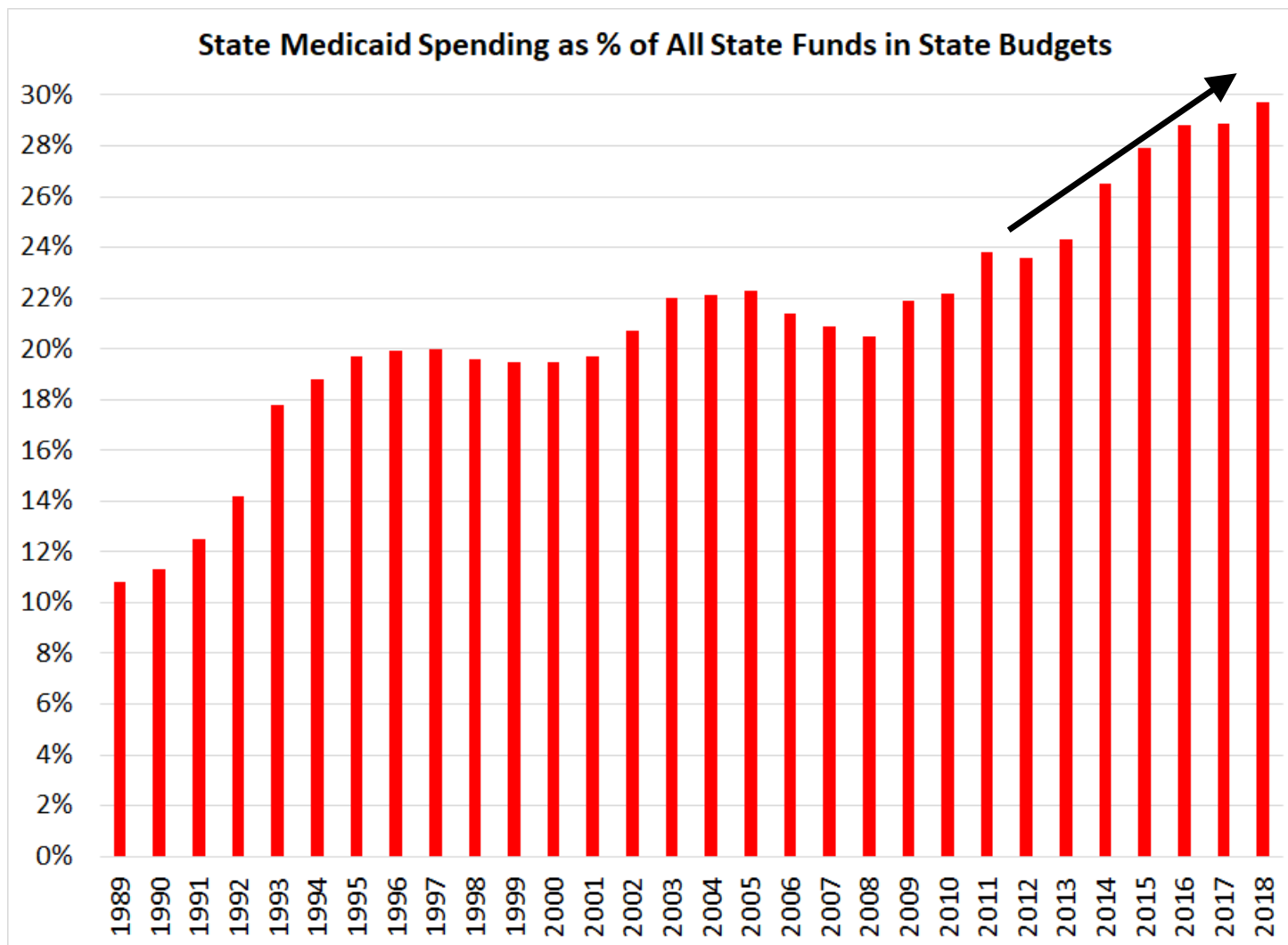
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- How to reduce the Federal deficit
- How to reduce health insurance premiums
- How to create “value-based payment” for oncology that will:
  - Save money,
  - Improve care for cancer patients, and
  - Maintain the financial viability of oncology practices

# U.S. Healthcare Spending is the Biggest Driver of Federal Deficits



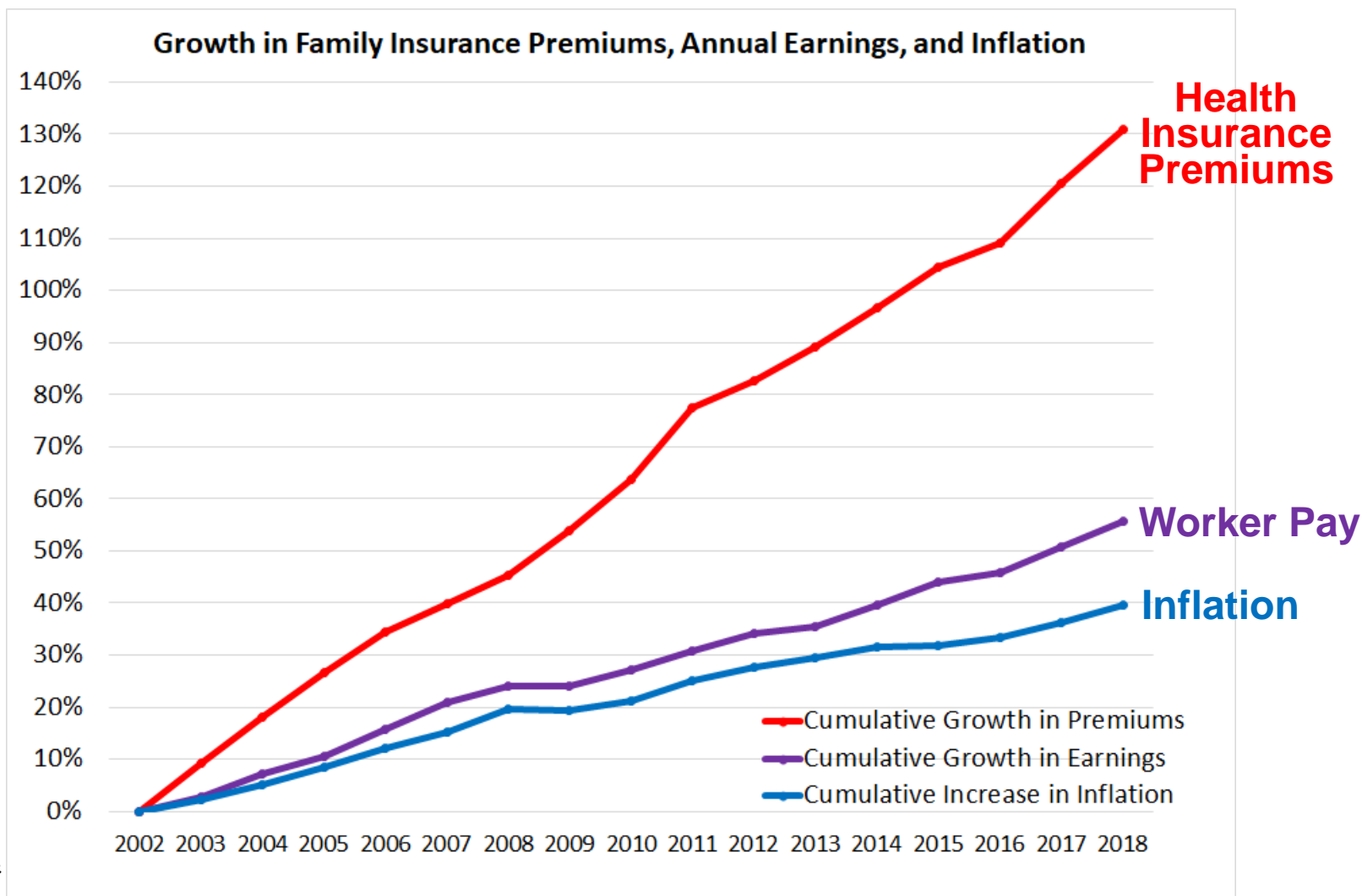
# Increasing Share of State Budgets Goes to Medicaid Spending



Nearly 1/3 of All State Funds Are Now Used for Medicaid

Source: NASBO

# Private Insurance Premiums Are Increasingly Unaffordable



Source:  
 Medical  
 Expenditure  
 Panel Survey &  
 Bureau of  
 Labor Statistics

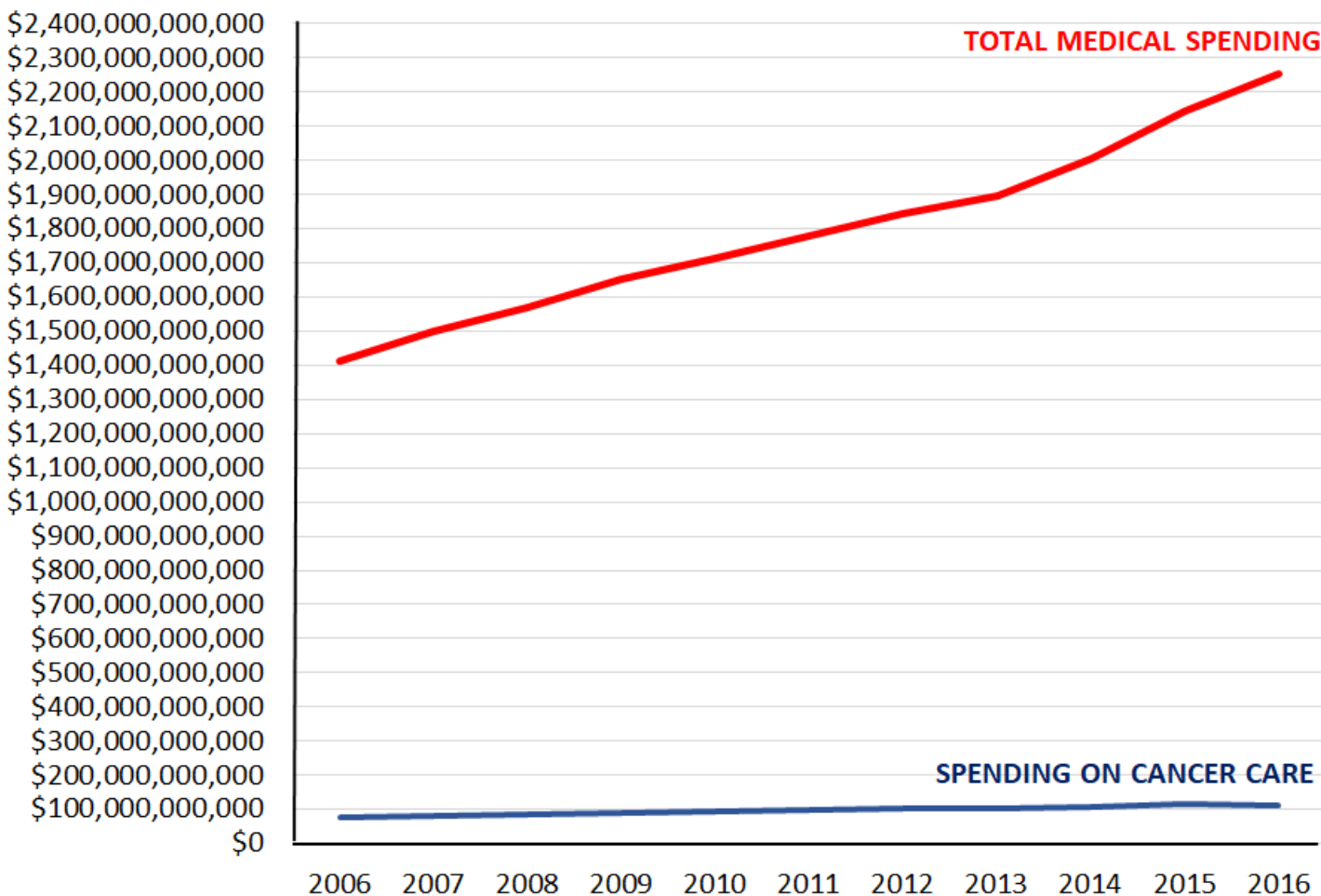
# The Impact of Cancer Care on U.S. Healthcare Spending

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- How much of the increase in total healthcare spending in the U.S. over the past decade was due to the growth in the cost of cancer care?
  - 5%
  - 10%
  - 20%
  - 30%
  - 50%

# Cancer Care Spending Was Only 3.9% of Total Spending Growth

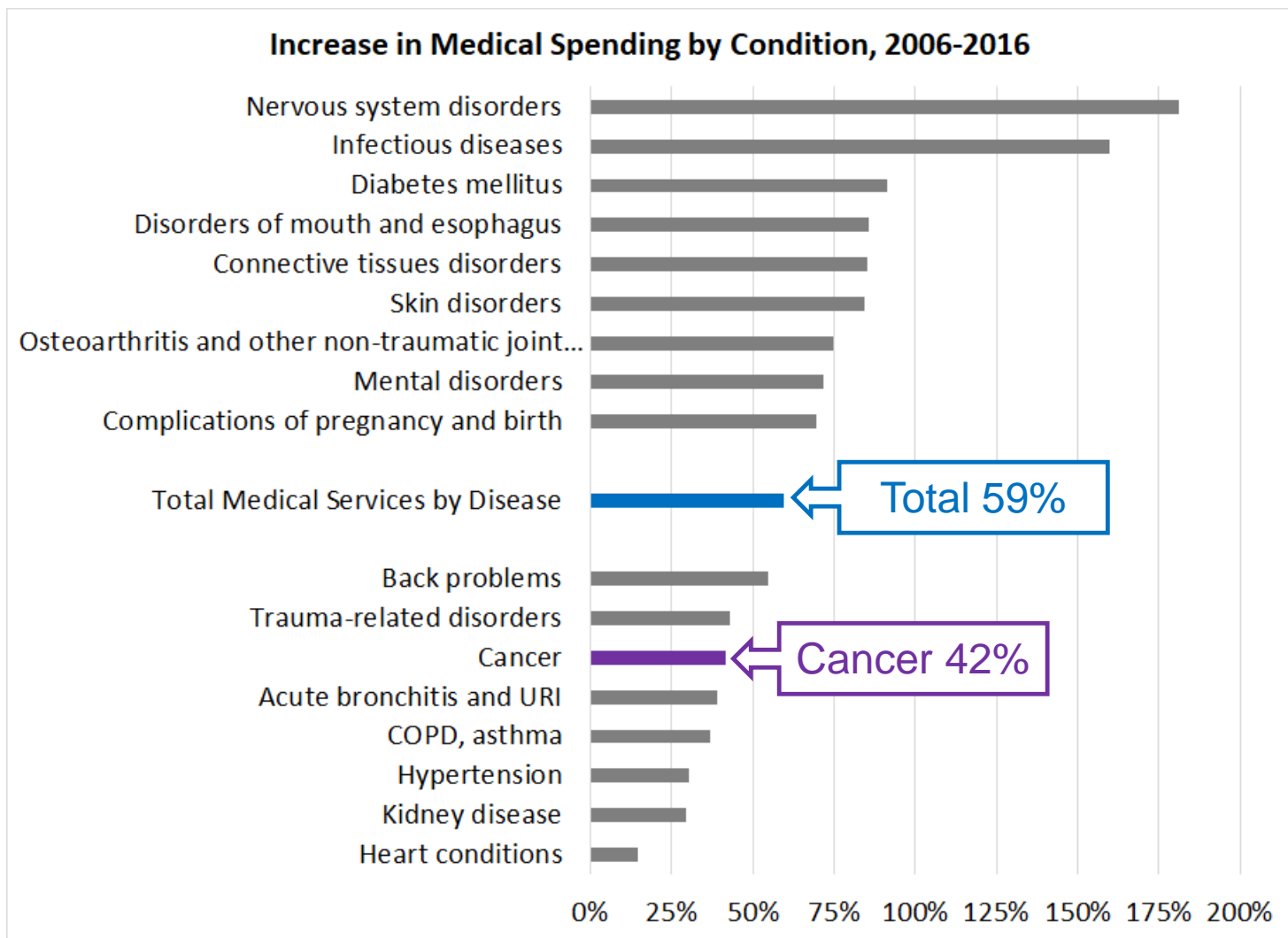
U.S. Spending on All Medical Services and Cancer Care, 2006-2016



SOURCE:  
U.S. Bureau of  
Economic  
Analysis,  
Health Care  
Satellite  
Account,  
2016 Data  
(Released  
Sept. 2019)

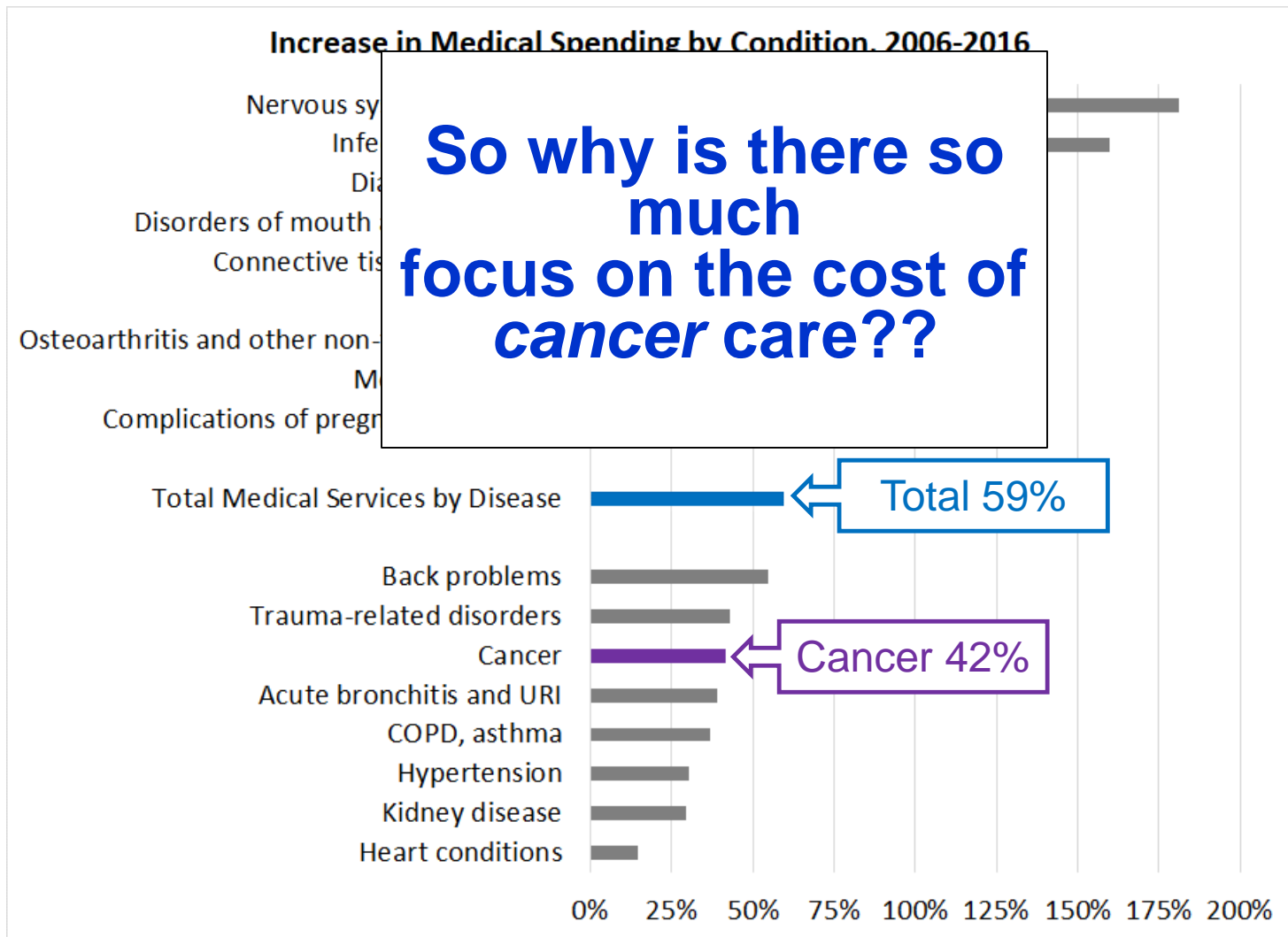


# Growth in Cancer Care Spending Less Than Many Other Diseases



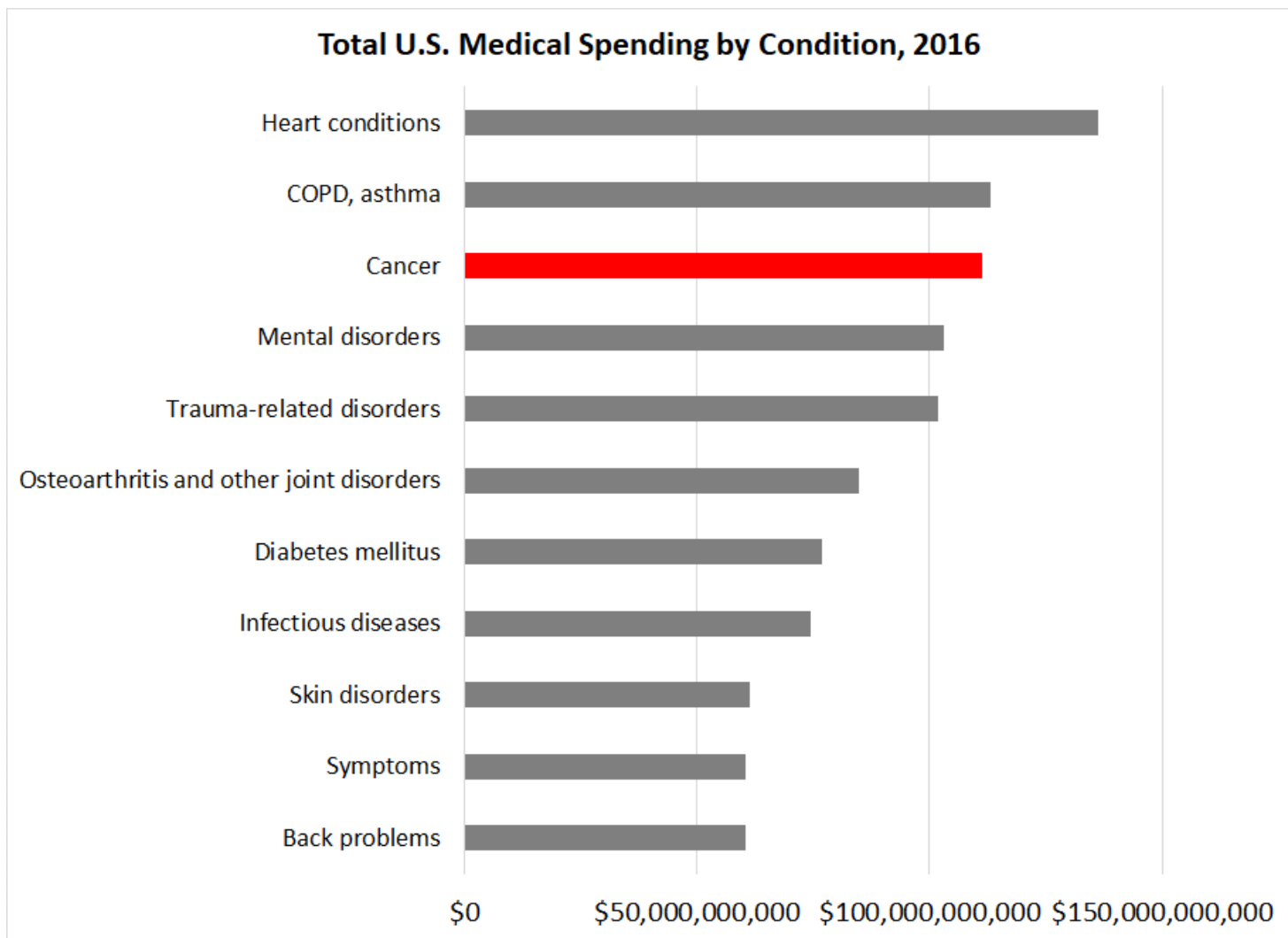
SOURCE:  
U.S. Bureau of  
Economic  
Analysis,  
Health Care  
Satellite  
Account,  
2016 Data  
(Released  
Sept. 2019)

# Growth in Cancer Care Spending Less Than Many Other Diseases



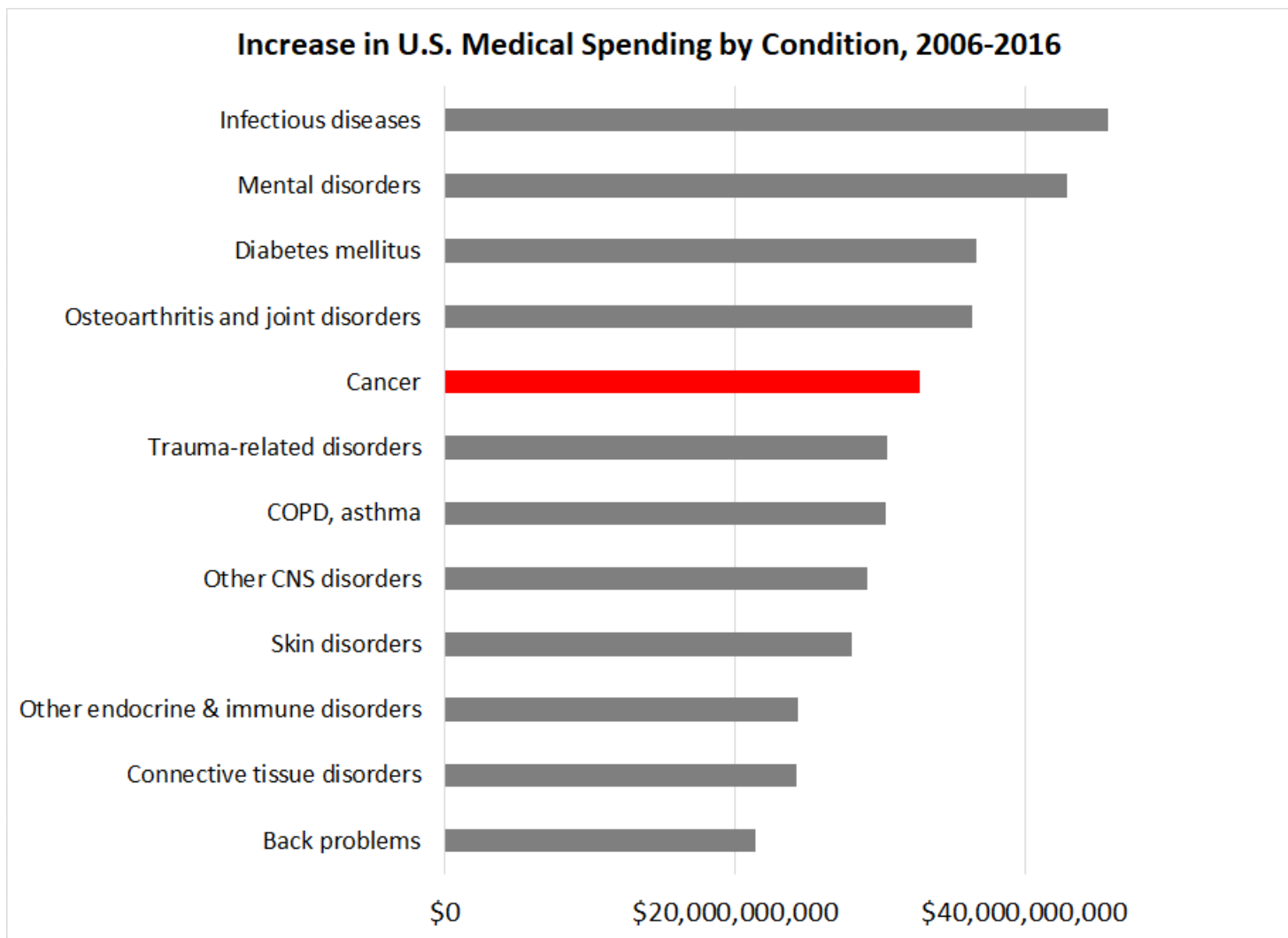
SOURCE:  
U.S. Bureau of  
Economic  
Analysis,  
Health Care  
Satellite  
Account,  
2016 Data  
(Released  
Sept. 2019)

# Cancer is The Third Largest Area of *Total* Spending



SOURCE:  
U.S. Bureau of  
Economic  
Analysis,  
Health Care  
Satellite  
Account,  
2016 Data  
(Released  
Sept. 2019)

# Cancer Was the 5<sup>th</sup> Largest \$ Contributor to Total Cost Growth

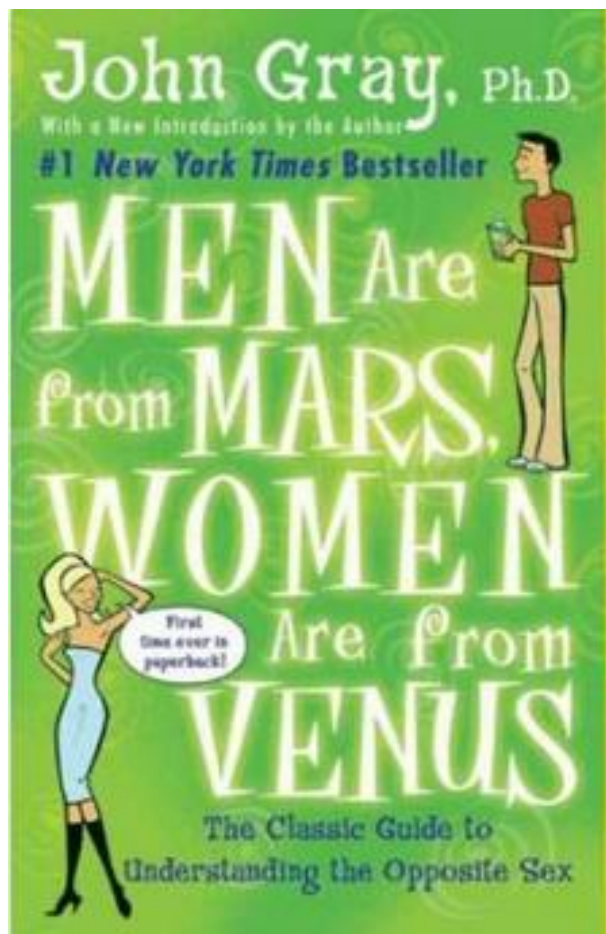


SOURCE:  
U.S. Bureau of  
Economic  
Analysis,  
Health Care  
Satellite  
Account,  
2016 Data  
(Released  
Sept. 2019)

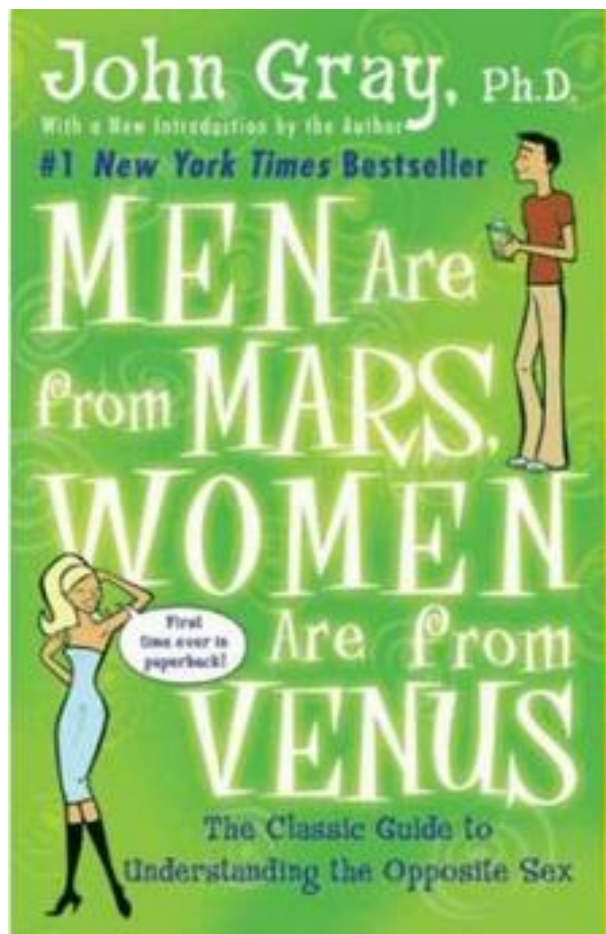
# Can Cancer Spending Be Reduced Without Harming Patients??

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# Can Cancer Spending Be Reduced Without Harming Patients??



# Can Cancer Spending Be Reduced Without Harming Patients??



In Healthcare,  
*Payers* Are From Mars,  
*Providers* Are From Venus

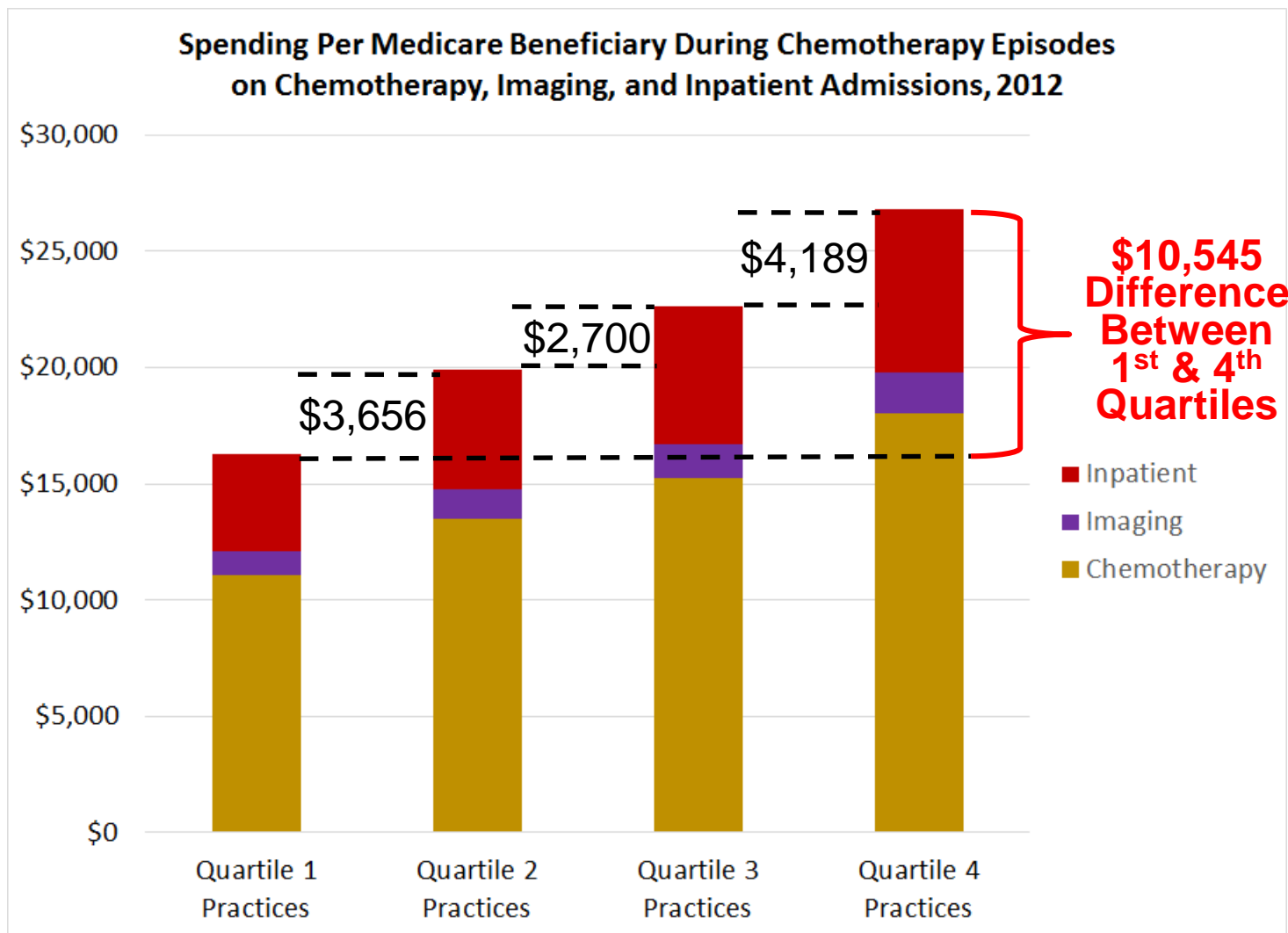
# How Payers See the Problems in Cancer Care

***“MARS”***

**WHAT PAYERS SEE AS THE  
PROBLEMS IN CANCER CARE**



# Spending on Oncology Services Varies Significantly By Practice



Source:  
Clough, Patel, Riley,  
Rajkumar, Conway,  
Bach.  
"Wide Variation in  
Payments for  
Medicare  
Beneficiary  
Oncology Services  
Suggests Room for  
Practice-Level  
Improvement."  
Health Affairs,  
April 2015

# Variation in Services Is Not Driven By Differences in Patients

## Variation in the Cost of Radiation Therapy Among Medicare Patients With Cancer

By Anthony J. Paravati, MD, MBA, Isabel J. Boero, MS, Daniel P. Triplett, MPH, Lindsay Hwang, Rayna K. Matsuno, PhD, MPH, Beibei Xu, PhD, Loren K. Mell, MD, and James D. Murphy, MD, MS

Moores Cancer Center, University of California San Diego, La Jolla, CA; and Medical Informatics Center, Peking University, Beijing, People's Republic of China

### Abstract

**Purpose:** Radiation therapy represents a major source of health care expenditure for patients with cancer. Understanding the sources of variability in the cost of radiation therapy is critical to evaluating the efficiency of the current reimbursement system and could shape future policy reform. This study defines the magnitude and sources of variation in the cost of radiation therapy for a large cohort of Medicare beneficiaries.

**Patients and Methods:** We identified 55,288 patients within the SEER database diagnosed with breast, lung, or prostate cancer between 2004 and 2009. The cost of radiation therapy was estimated from Medicare reimbursements. Multivariable linear regression models were used to assess the influence of patient, tumor, and radiation therapy provider characteristics on variation in cost of radiation therapy.

**Results:** For breast, lung, and prostate cancers, the median cost (interquartile range) of a course of radiation therapy was \$8,600 (\$7,300 to \$10,300), \$9,000 (\$7,500 to \$11,100), and \$18,000 (\$11,300 to \$25,500), respectively. For all three cancer subtypes, patient- or tumor-related factors accounted for < 3% of the variation in cost. Factors unrelated to the patient, including practice type, geography, and individual radiation therapy provider, accounted for a substantial proportion of the variation in cost, ranging from 44% with breast, 43% with lung, and 61% with prostate cancer.

**Conclusion:** In this study, factors unrelated to the individual patient accounted for the majority of variation in the cost of radiation therapy, suggesting potential inefficiency in health care expenditure. Future research should determine whether this variability translates into improved patient outcomes for further evaluation of current reimbursement practices.

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Journal of Oncology Practice 11(5), September 2015

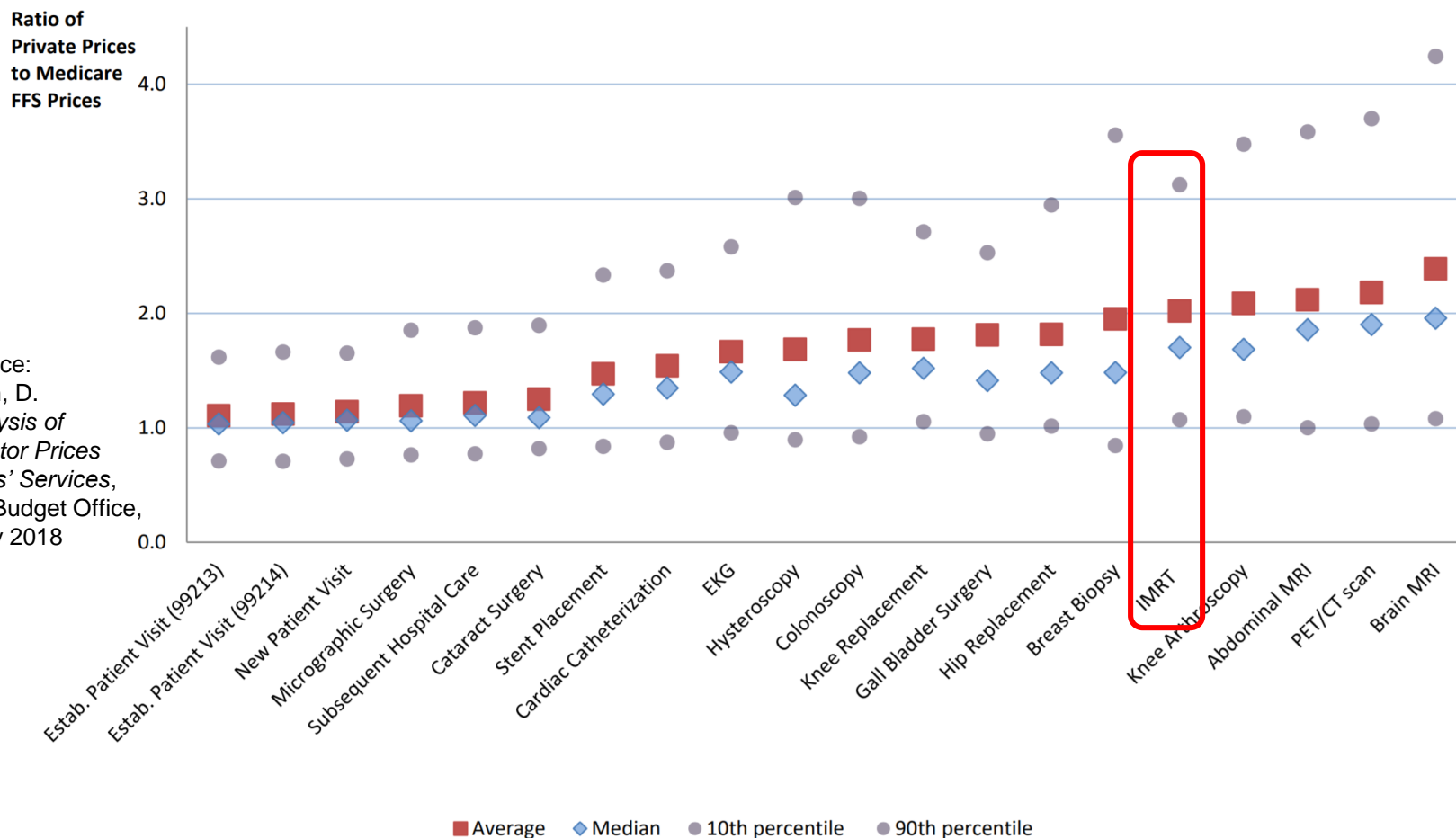
# A Lot of Cancer Care is More Expensive Than Necessary

Type of Cancer	Average Total Spending Per Patient Per Month		Difference
	Community Practice	Hospital Practice	
Breast Cancer	\$11,599	\$19,279	+66%
Lung Cancer	\$17,566	\$26,980	+54%
Colorectal Cancer	\$12,368	\$19,346	+56%
All Cancers	\$12,548	\$20,060	+60%

Source: Gordan L et al. "Cost Differences Associated with Oncology Care Delivered in a Community Setting Versus a Hospital Setting: A Matched-Claims Analysis of Patients With Breast, Colorectal, and Lung Cancers," *Journal of Oncology Practice* 14(12): e729-e738 (December 2018).

# 3-Fold Variation in Price of Radiation Therapy Across U.S.

Figure 1. Commercial Prices for Selected Physicians' Services, 2014



# It's Bad Enough That Cancer Drugs Are So Expensive...

	Spending Per Patient	
	Rituximab	Nivolumab
Average Sales Price (ASP)	\$23,880	\$48,490

# ... But Oncologists Are “Profiting” From Ordering Expensive Drugs

	Spending Per Patient	
	Rituximab	Nivolumab
Average Sales Price (ASP)	\$23,880	\$48,490
+ 4.3%	\$ 1,027	\$ 2,085
Medicare Payment	\$24,906	\$50,575

# ... But Oncologists Are “Profiting” From Ordering Expensive Drugs

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<b>+ 4.3%</b>	<b>\$ 1,027</b>	<b>\$ 2,085</b>
Medicare Payment	\$24,906	\$50,575
<b>+15.0%</b>	<b>\$ 3,582</b>	<b>\$ 7,274</b>
Commercial Payment	\$27,461	\$55,764

# ... But Oncologists Are “Profiting” From Ordering Expensive Drugs

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Commercial Payment	\$27,461	\$55,764
<b>+50.0%</b>	<b>\$11,940</b>	<b>\$24,245</b>
Commercial Payment	\$35,820	\$72,735



# How *Payers* See the Problems in Cancer Care

## ***“MARS”***

### **WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE**

Unwarranted variation in services

Overpayment for many services

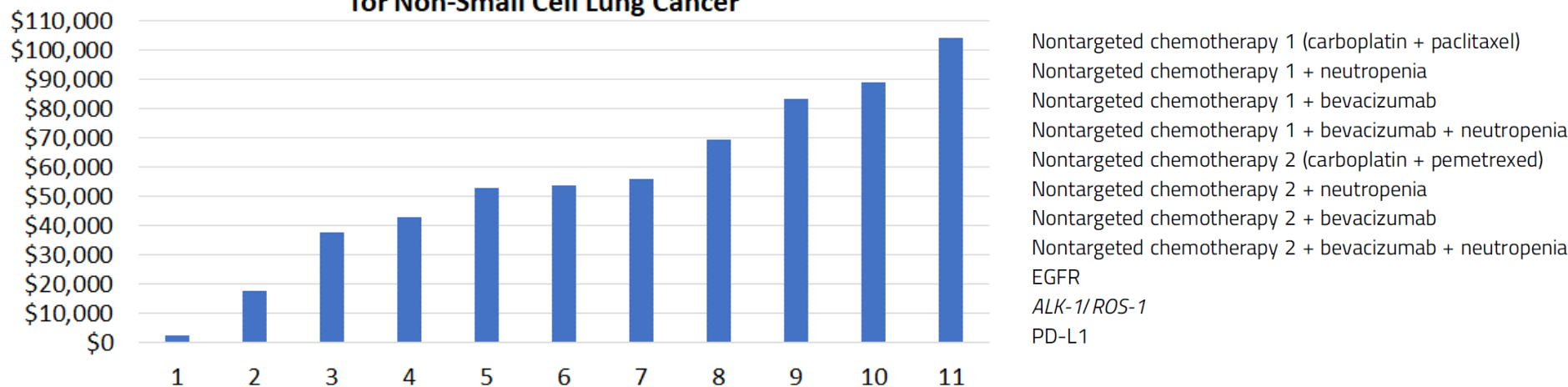
Providers profiting from high-cost services

# How *Providers* See the Problems in Cancer Care

<b>“MARS”</b>	<b>“VENUS”</b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
Unwarranted variation in services	
Overpayment for many services	
Providers profiting from high-cost services	

# Treatment Costs Vary Because Patients Are *Different*

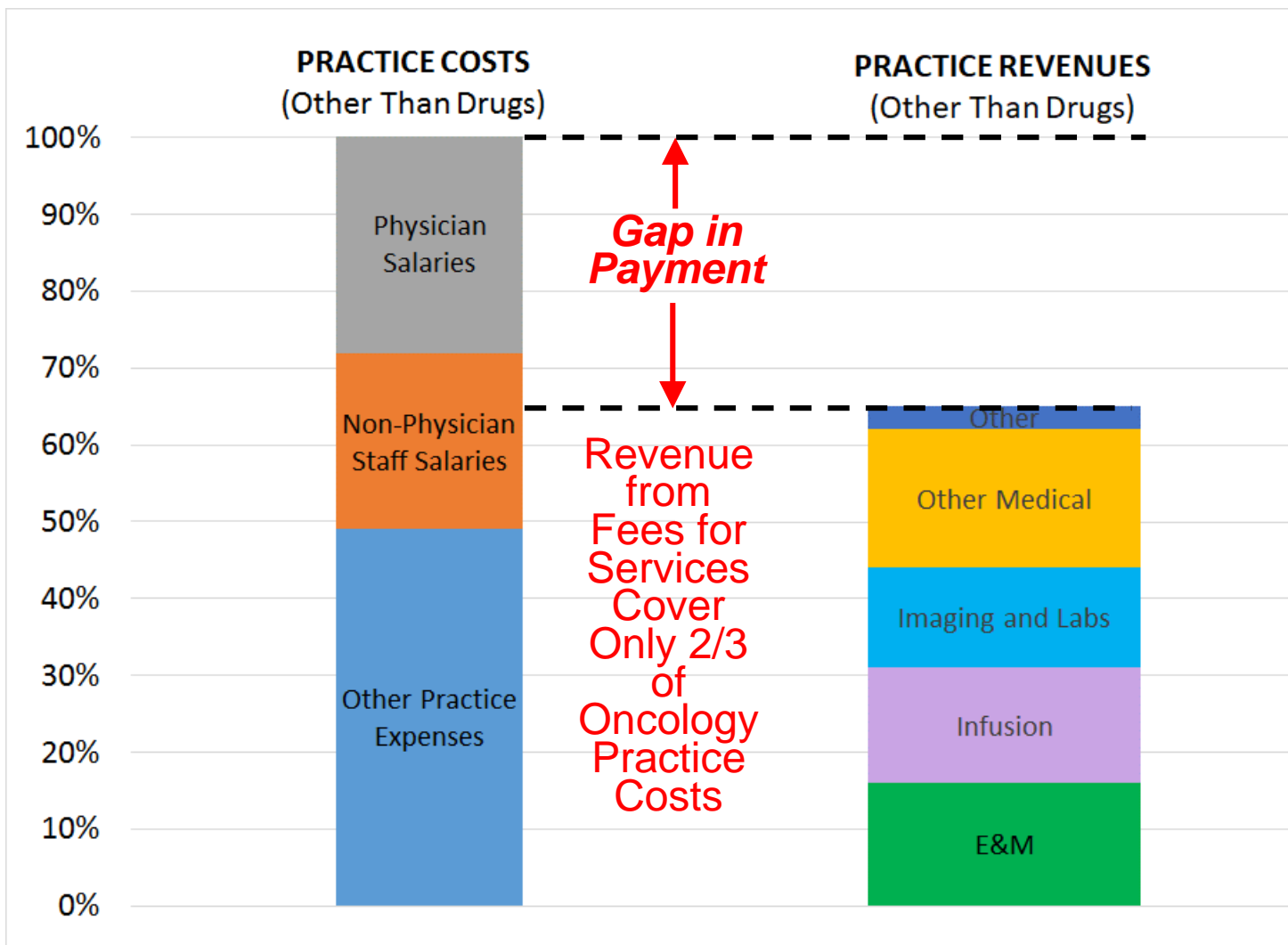
**Episode Costs of Alternative Chemotherapy Treatments  
for Non-Small Cell Lung Cancer**



**11 Different Chemotherapy/Immunotherapy Regimens  
Ranging from \$2,500 to \$105,000  
Depending on Patient Characteristics**

Ward JC et al. Impact on Oncology Practices of Including  
Drug Costs in Bundled Payments.  
*Journal of Oncology Practice* 14(5), May 2018

# Oncology Practices Are Paid Far Less Than Services Cost



SOURCE:  
Towle EL,  
Barr TR,  
Senese JL,  
"The National  
Practice Benchmark  
for Oncology,  
2014 Report on  
2013 Data"  
*Journal of  
Oncology Practice*  
November 2014

# What Oncology Practices Do Before Treatment Begins

## WHAT ONCOLOGY PRACTICES DO

### Diagnosis and Treatment Planning

- Review tests & pathology reports
- Determine type and stage of cancer
- Identify and evaluate treatment options
- Identify clinical trial options
- Discuss treatment options with patient
- Develop plan of care
- Educate patient about treatment
- Provide genetic counseling
- Provide psychological counseling
- Provide nutrition counseling
- Provide financial counseling
- Determine insurance coverage and obtain pre-authorization
- Document information in records
- Etc.

# Most of Those Activities Aren't Paid For

## WHAT ONCOLOGY PRACTICES DO

### Diagnosis and Treatment Planning

- Review tests & pathology reports
- Determine type and stage of cancer
- Identify and evaluate treatment options
- Identify clinical trial options
- Discuss treatment options with patient
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- Provide nutrition counseling
- Provide financial counseling
- Determine insurance coverage and obtain pre-authorization
- Document information in records
- Etc.

## HOW PRACTICES ARE PAID

- E&M payments for face-to-face visits with physicians

*(No payments for services delivered by nurses, social workers, financial counselors, etc.)*

*(No payments for time spent by physicians on phone calls with patients and other physicians, researching treatment options, etc.)*

# No Payments for Many Services When Parenteral Therapy is Used

## WHAT ONCOLOGY PRACTICES DO

### Parenteral Therapy

- Administer IV therapy
- Order tests
- Evaluate patient progress
- Meet with patient to discuss progress
- Answer calls from patients
- Respond to complications
- Manage patients' pain
- Document information in records
- Keep detailed records for clinical trials
- Bill insurance companies
- Discuss end-of-life planning with patient
- Etc.

## HOW PRACTICES ARE PAID

- E&M payments for face-to-face visits with physicians
- Payment for in-office infusions
- ASP+x% - acquisition cost of drugs

*(No payments for services delivered by nurses, social workers, financial counselors, etc.)*

*(No payments for time spent by physicians on phone calls with patients and other physicians, etc.)*

*(No payments for care management services to help patients address complications without ED visits)*

# No Payment for Most Services When Oral Therapy is Used

## WHAT ONCOLOGY PRACTICES DO

### Oral Therapy

- Prescribe drugs
- Order tests
- Evaluate patient progress
- Meet with patient to discuss progress
- Answer calls from patients
- Respond to complications
- Manage patients' pain
- Document information in records
- Keep detailed records for clinical trials
- Discuss end-of-life planning with patient
- Etc.

## HOW PRACTICES ARE PAID

- E&M payments for face-to-face visits with physicians

*(No payments for services delivered by nurses, social workers, financial counselors, etc.)*

*(No payments for time spent by physicians on phone calls with patients and other physicians, etc.)*



# Few Payments for Services to Patients After Treatment Ends

## WHAT ONCOLOGY PRACTICES DO

### Post-Treatment

- Develop a survivorship or end-of-life plan
- Order and review tests
- See patient to address needs
- Answer calls from patients
- Respond to post-treatment complications
- Manage patients' pain
- Document information in records
- Keep detailed records for clinical trials
- Etc.

## HOW PRACTICES ARE PAID

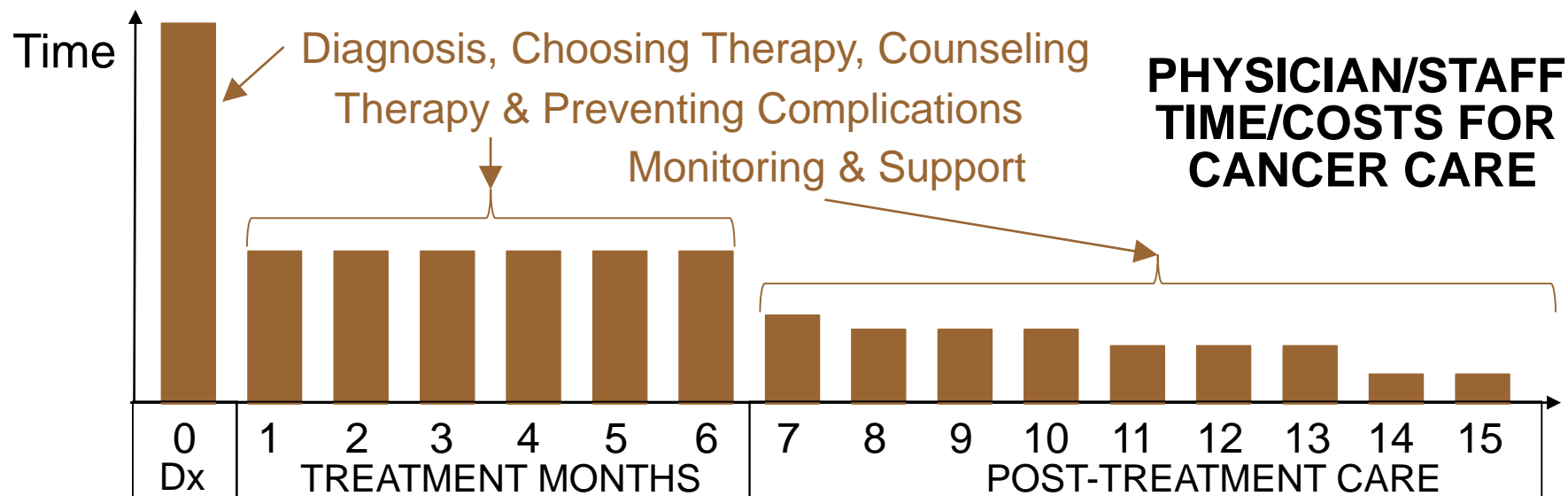
- E&M payments for face-to-face visits with physicians

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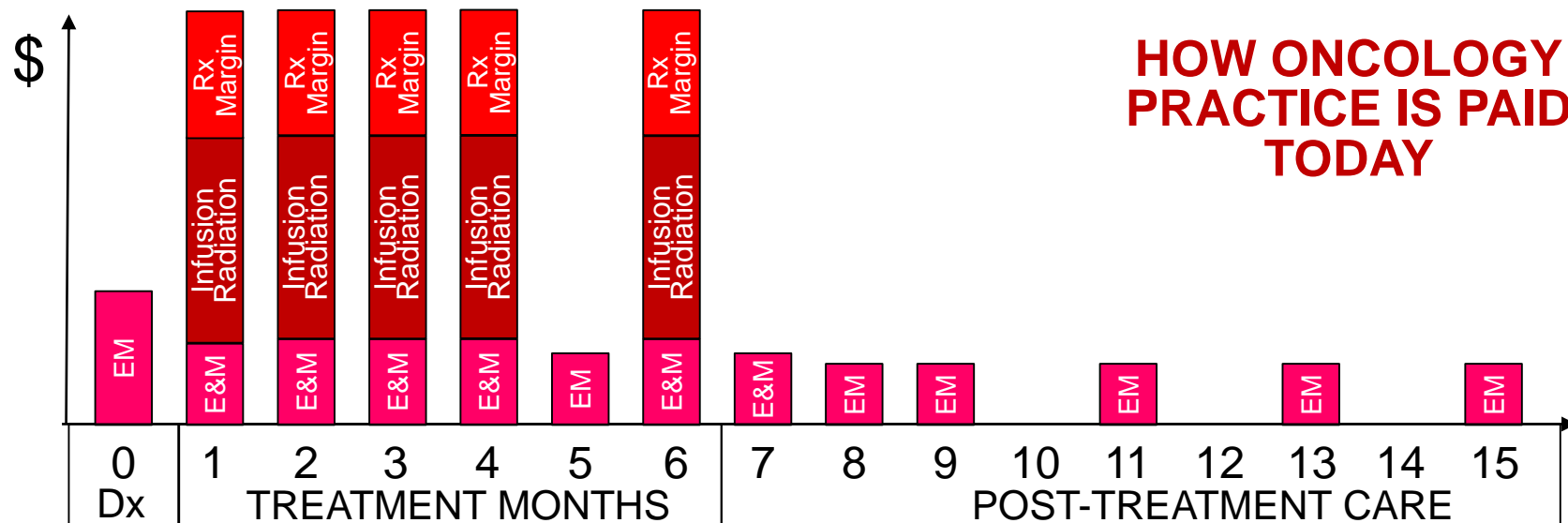
*(No payments for time spent by physicians on phone calls with patients and other physicians, etc.)*

*(No payments for palliative care services to patients)*

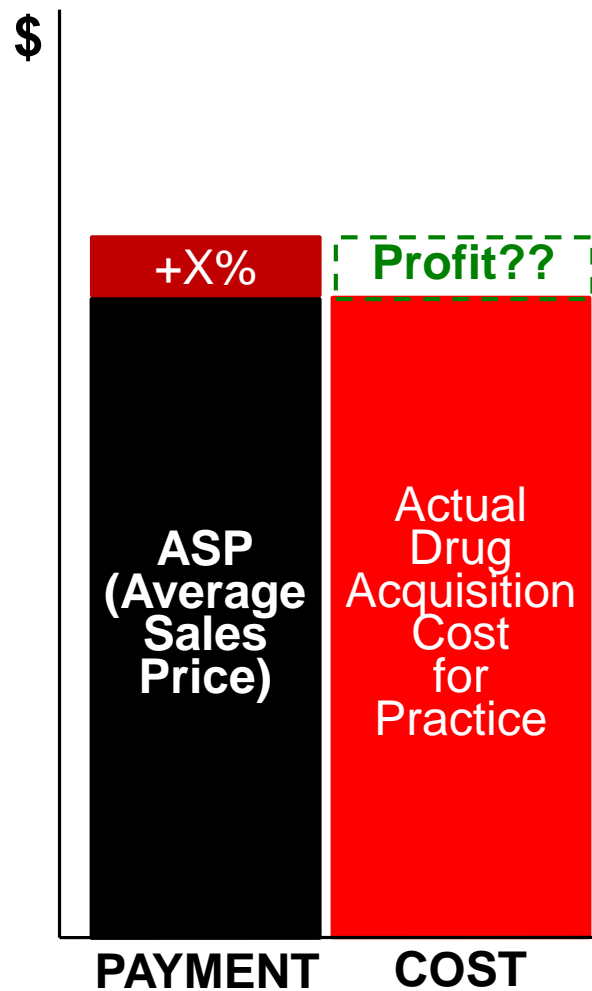
# How Oncology Practices Spend Their Time



# Payments to Oncology Practices Don't Match Their Time & Costs

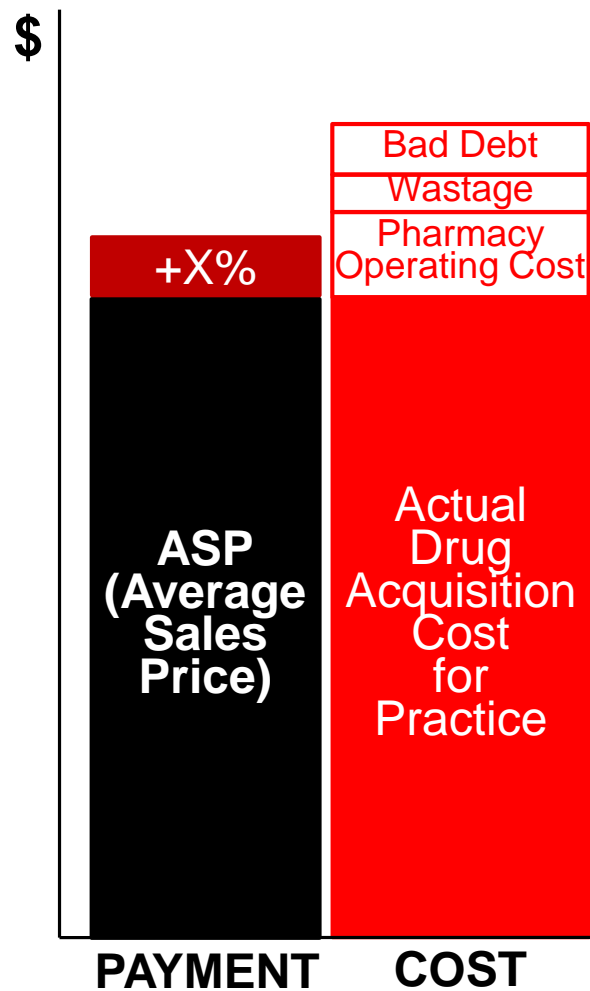


# ASP + X% Might *Appear* to Create Profits for Oncologists...



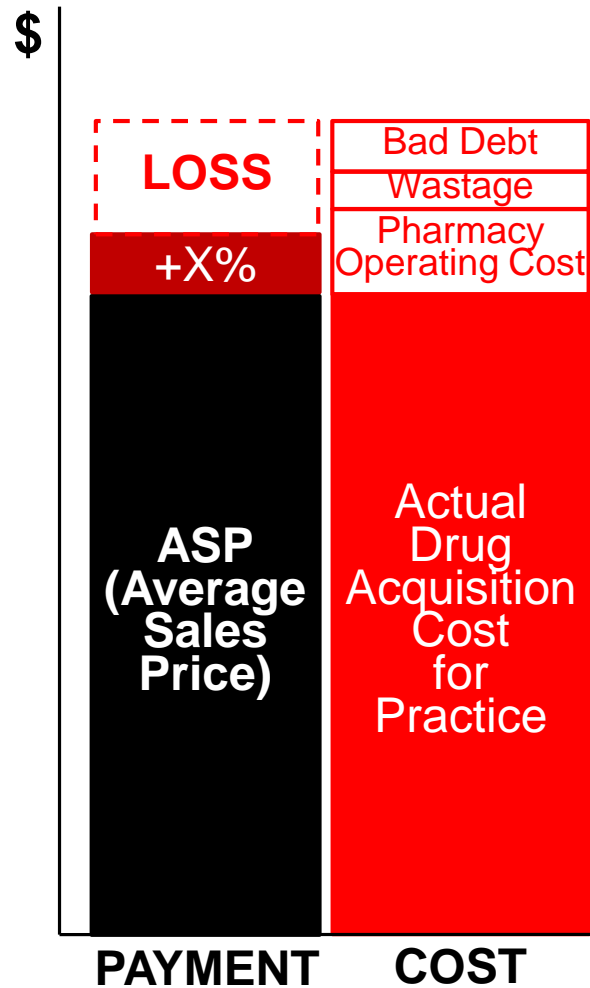
NOTE: Chart not drawn to scale

# ...But the Oncology Practice Has Costs Beyond Drug Acquisition...



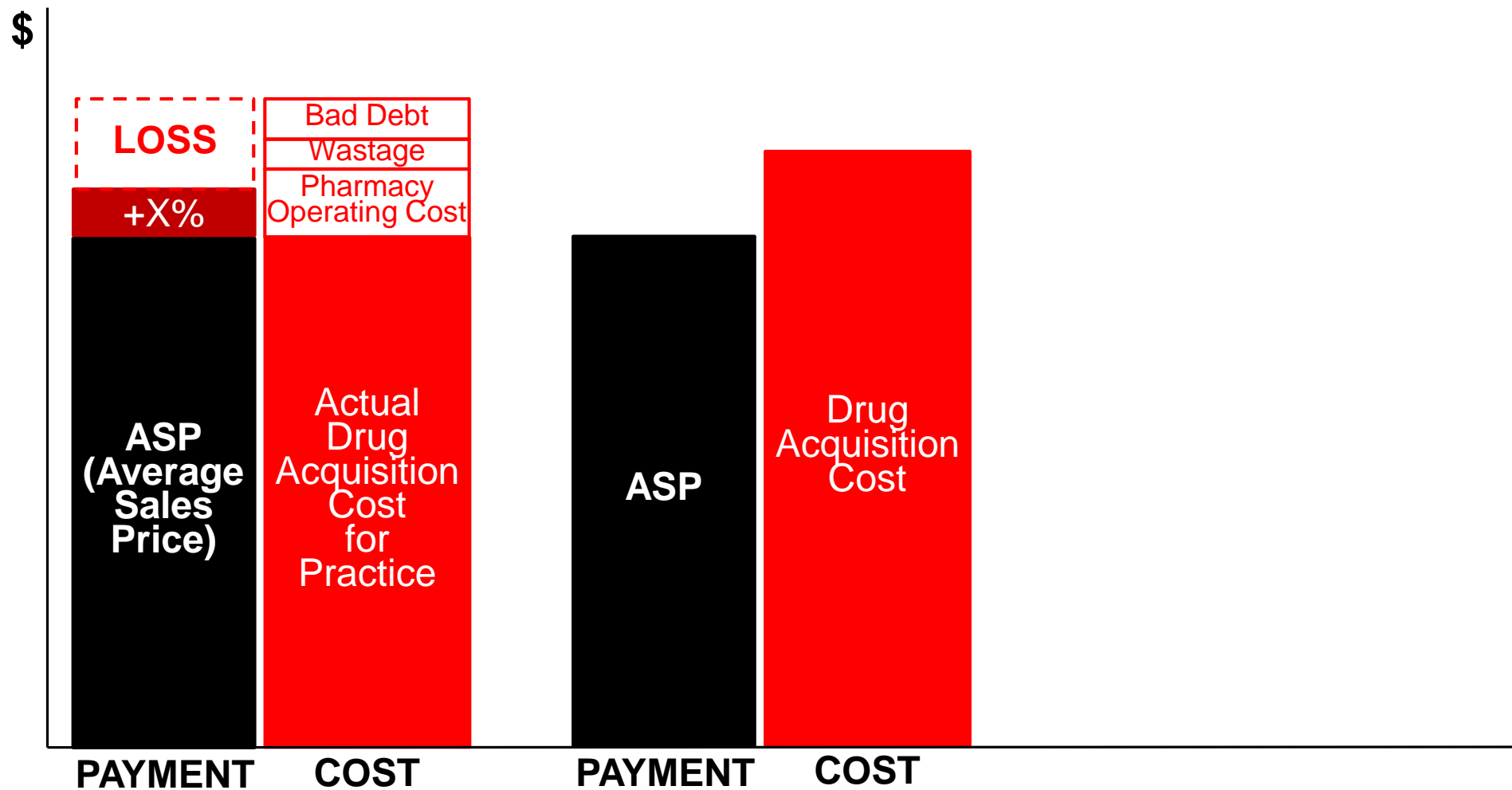
NOTE: Chart not drawn to scale

# ...Resulting in Losses, Not Profits



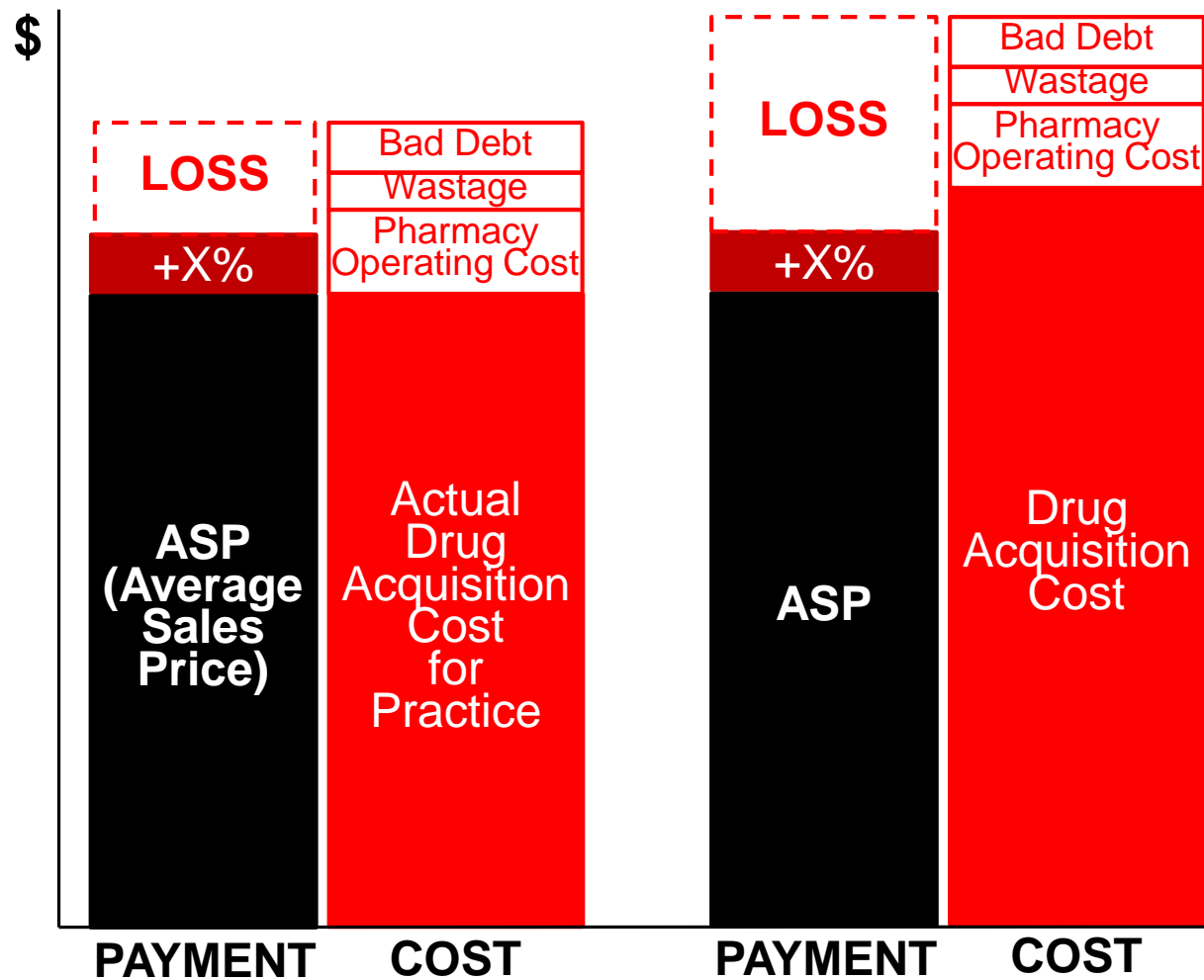
NOTE: Chart not drawn to scale

# There is No Guarantee a Practice Can Actually *Buy* a Drug at “ASP”



NOTE: Chart not drawn to scale

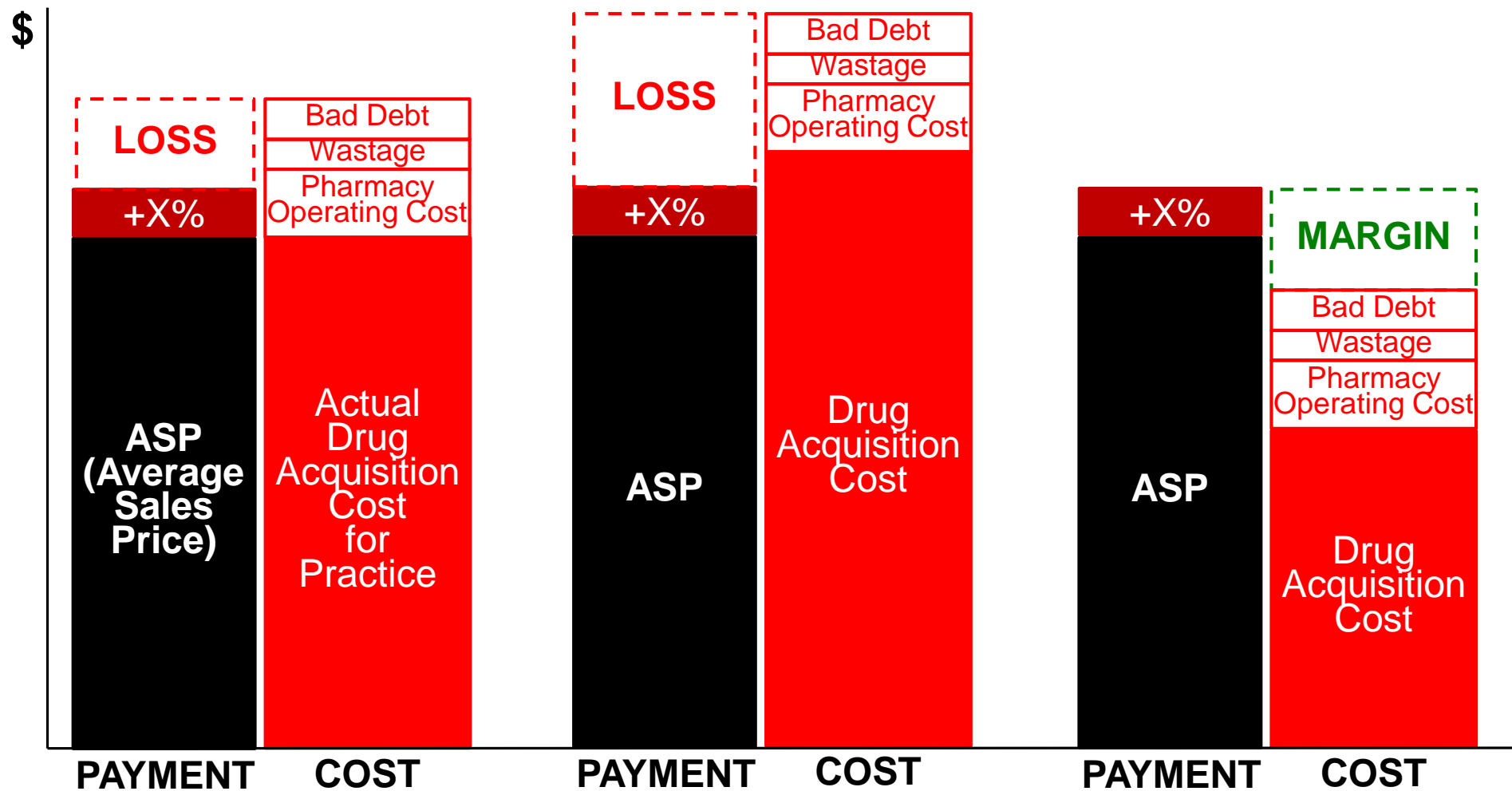
# So Losses Can Be Much Greater



NOTE: Chart not drawn to scale

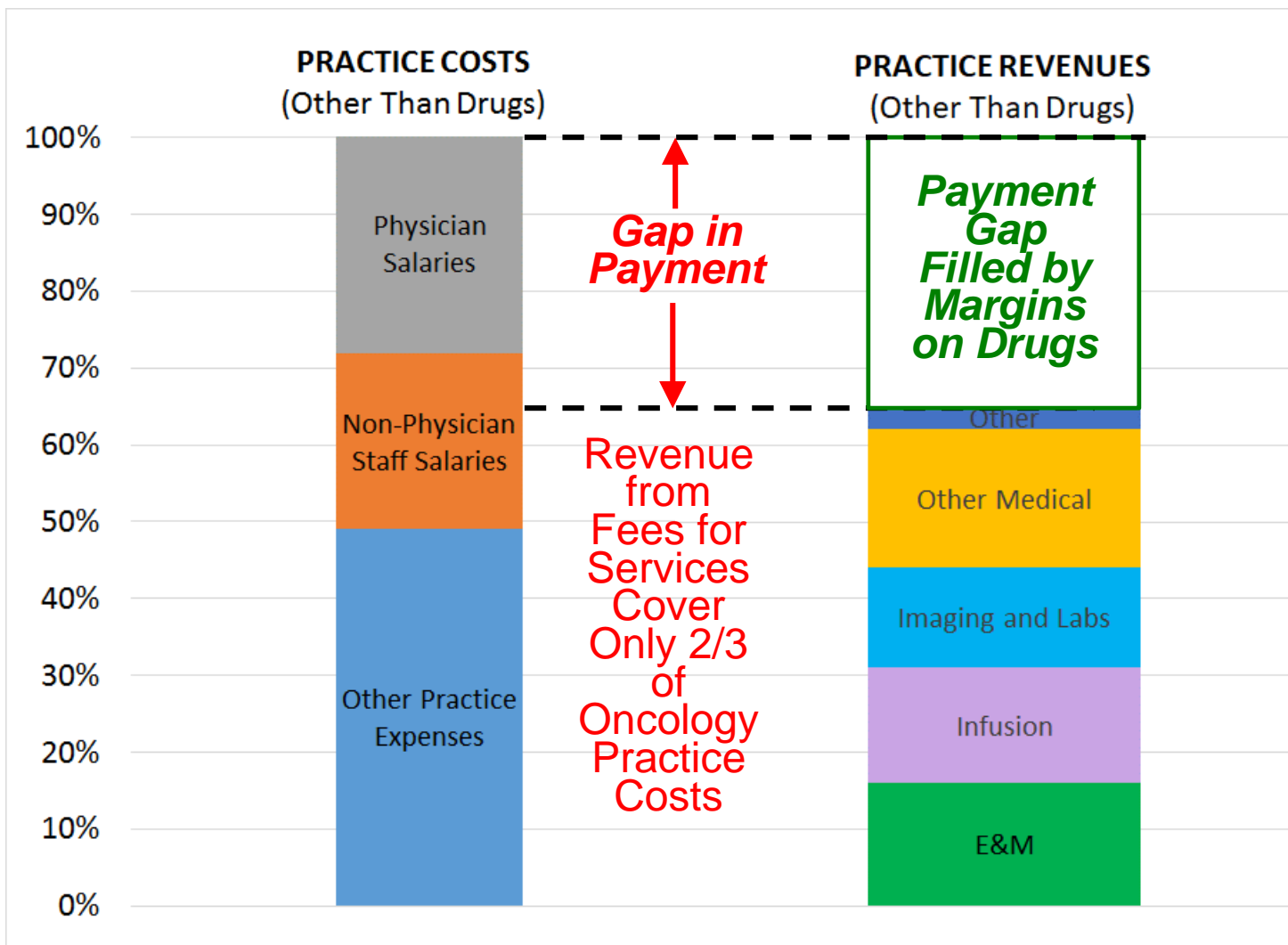


# When There is a Profit, It Offsets Losses on Other Drugs



NOTE: Chart not drawn to scale

# Without Drug Margins, Oncology Practices Couldn't Stay Afloat



SOURCE:  
Towle EL,  
Barr TR,  
Senese JL,  
"The National  
Practice Benchmark  
for Oncology,  
2014 Report on  
2013 Data"  
*Journal of  
Oncology Practice*  
November 2014

# What *Payers* See as the Problems in Cancer Care

<b><i>“MARS”</i></b>	<b><i>“VENUS”</i></b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
Unwarranted variation in services	
Overpayment for many services	
Providers profiting from high-cost services	

# What *Providers* See as the Problems in Cancer Care

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<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
Unwarranted variation in services	Wide variation in patient needs
Overpayment for many services	Underpayment for many services
Providers profiting from high-cost services	Cross-subsidies needed to cover costs

# What Do Payers Propose as Solutions in Cancer Care?

<b>“MARS”</b>	<b>“VENUS”</b>
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**WHAT PAYERS PROPOSE AS SOLUTIONS**

# What Payers Propose as Solutions in Cancer Care

## **“MARS”**

## **“VENUS”**

### **WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE**

### **WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE**

Unwarranted variation in services

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### **WHAT PAYERS PROPOSE AS SOLUTIONS**

Prior authorization

# What Payers Propose as Solutions in Cancer Care

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<b>WHAT PAYERS PROPOSE AS SOLUTIONS</b>
Prior authorization
Lower payments for services

# What Payers Propose as Solutions in Cancer Care

## **“MARS”**

## **“VENUS”**

### **WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE**

### **WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE**

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Cross-subsidies needed to cover costs

### **WHAT PAYERS PROPOSE AS SOLUTIONS**

Prior authorization

Lower payments for services

Cuts in drug payments  
+  
Specialty pharmacies



# What Do Providers Propose as Solutions in Cancer Care?

<b>“MARS”</b>	<b>“VENUS”</b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
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<b>WHAT PAYERS PROPOSE AS SOLUTIONS</b>	<b>WHAT PROVIDERS PROPOSE AS SOLUTIONS</b>
Prior authorization	
Lower payments for services	
Cuts in drug payments + Specialty pharmacies	

# What Providers Propose as Solutions in Cancer Care

## **“MARS”**

## **“VENUS”**

### **WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE**

### **WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE**

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### **WHAT PAYERS PROPOSE AS SOLUTIONS**

### **WHAT PROVIDERS PROPOSE AS SOLUTIONS**

Prior authorization

Accreditation

Lower payments for services

Cuts in drug payments  
+  
Specialty pharmacies

# What Providers Propose as Solutions in Cancer Care

<b>“MARS”</b>	<b>“VENUS”</b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
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<b>WHAT PAYERS PROPOSE AS SOLUTIONS</b>	<b>WHAT PROVIDERS PROPOSE AS SOLUTIONS</b>
Prior authorization	Accreditation
Lower payments for services	Higher payments for services
Cuts in drug payments + Specialty pharmacies	

# What Providers Propose as Solutions in Cancer Care

## **“MARS”**

## **“VENUS”**

### **WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE**

### **WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE**

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### **WHAT PAYERS PROPOSE AS SOLUTIONS**

### **WHAT PROVIDERS PROPOSE AS SOLUTIONS**

Prior authorization

Accreditation

Lower payments for services

Higher payments for services

Cuts in drug payments  
+  
Specialty pharmacies

Higher margins in buy-and-bill

# The Payer Approaches Won't Solve Any of the Problems

<b><i>"MARS"</i></b>	<b><i>"VENUS"</i></b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
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Prior authorization	Accreditation
Lower payments for services	Higher payments for services
Cuts in drug payments + Specialty pharmacies	Higher margins in buy-and-bill

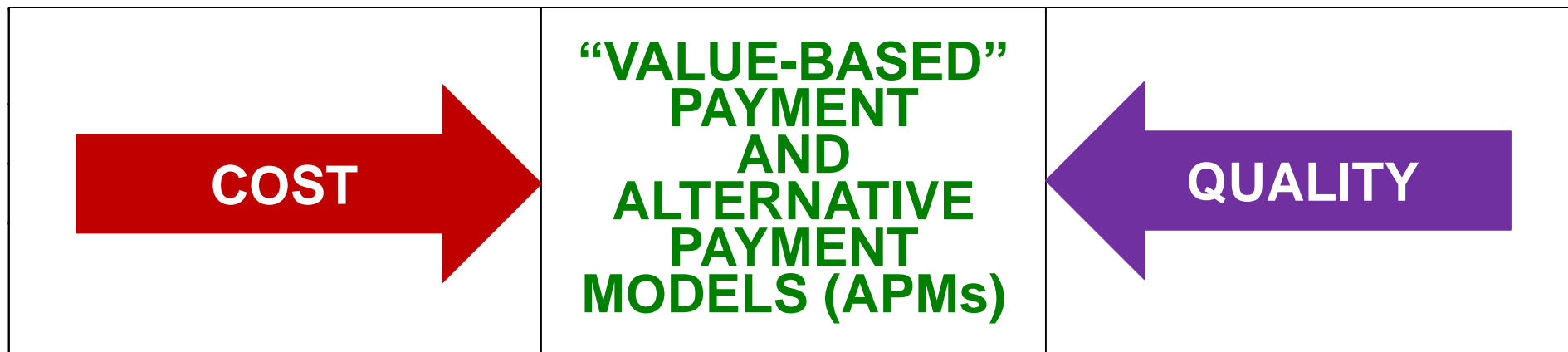
# The Provider Proposals Won't Solve Any of the Problems, Either

<b><i>"MARS"</i></b>	<b><i>"VENUS"</i></b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
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<b>WHAT PAYERS PROPOSE AS SOLUTIONS</b>	<b>WHAT PROVIDERS PROPOSE AS SOLUTIONS</b>
Prior authorization	Accreditation
Lower payments for services	Higher payments for services
Cuts in drug payments + Specialty pharmacies	Higher margins in buy-and-bill

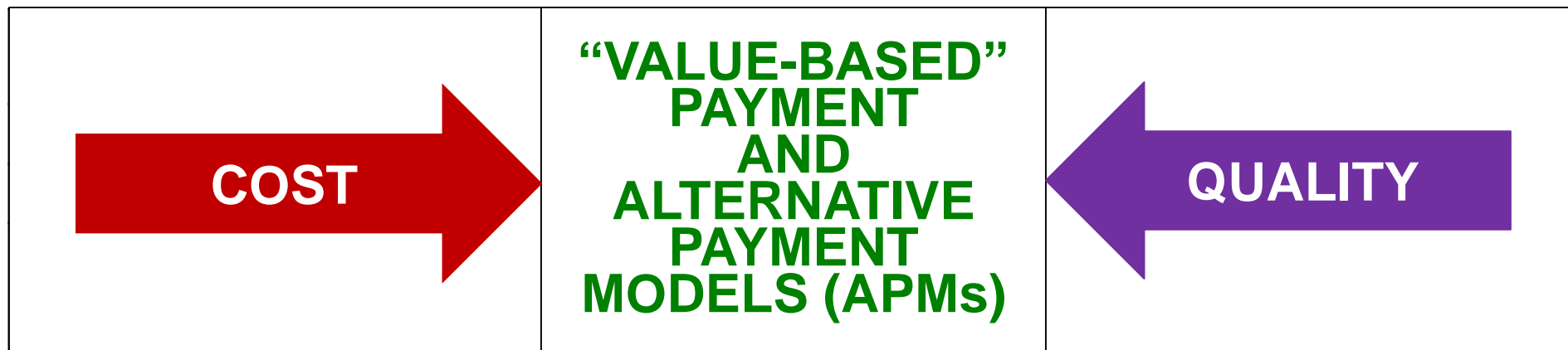
# Can “Value-Based” Payment Do Better?

<b>“MARS”</b>	<b>“VENUS”</b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
Unwarranted variation in services	Wide variation in patient needs
Overpayment for many services	Underpayment for many services
Providers profiting from high-cost services	Cross-subsidies needed to cover costs



# Can “Value-Based” Payment Do Better?

<b>“MARS”</b>	<b>“VENUS”</b>
<b>WHAT PAYERS SEE AS THE PROBLEMS IN CANCER CARE</b>	<b>WHAT PROVIDERS SEE AS THE PROBLEMS IN CANCER CARE</b>
Unwarranted variation in services	Wide variation in patient needs
Overpayment for many services	Underpayment for many services
Providers profiting from high-cost services	Cross-subsidies needed to cover costs



***HOW DO YOU DEFINE “VALUE?”***



# A Commonly-Used Definition of Value

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$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

# Which Would Be Higher Value Care?

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	<b>QUALITY</b>	<b>COST</b>
Treatment #1	10 Year Survival	\$50,000
Treatment #2	7 Year Survival	\$30,000

# Is it “Higher Value” to Die Three Years Sooner?

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000
Treatment #2	7 Year Survival	\$30,000	0.23 Year/ \$1000

# Would Treatment #3 Be Higher Value Care?

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000
Treatment #2	7 Year Survival	\$30,000	0.23 Year/ \$1000
Treatment #3	20 Year Survival	\$55,000	

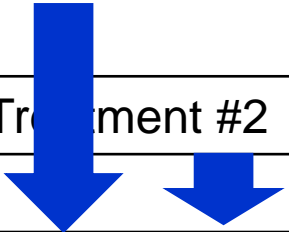
# Treatment #3 Scores Best on the Value Equation

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000
Treatment #2	7 Year Survival	\$30,000	0.23 Year/ \$1000
Treatment #3	20 Year Survival	\$55,000	0.36 Year/ \$1000

# Could We Create an APM to Encourage Use of Treatment #3?

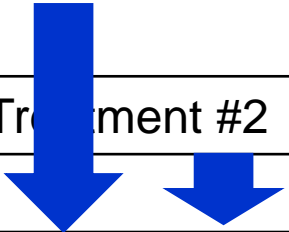
$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
	Treatment #2	\$30,000	0.23 Year/ \$1000	
	<b>Treatment #3</b>	\$55,000	0.36 Year/ \$1000	

**APM = “Alternative Payment Model”**

# No!

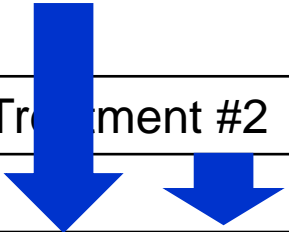
$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
	Treatment #2	\$30,000	0.23 Year/ \$1000	
	<b>Treatment #3</b>	\$55,000	0.36 Year/ \$1000	<b>No</b>

**APM = “Alternative Payment Model”**

# MACRA Has a Specific Definition of What an APM Must Do

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$

	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
	Treatment #2	\$30,000	0.23 Year/ \$1000	
	<b>Treatment #3</b>	\$55,000	0.36 Year/ \$1000	<b>No</b>

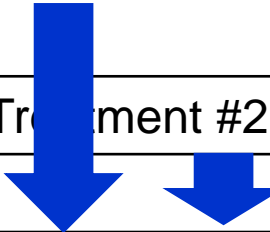
**An Alternative Payment Model (APM) under MACRA must:**

- improve the quality of care without increasing spending;
- reduce spending without reducing the quality of care; or
- improve the quality of care and reduce spending



# An APM Can't Increase Spending, Even With Much Better Outcomes

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$



	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
				
Treatment #2	7 Year Survival	\$30,000	0.23 Year/ \$1000	
<b>Treatment #3</b>	20 Year Survival	\$55,000	0.36 Year/ \$1000	<b>No</b>

## An Alternative Payment Model (APM) under MACRA must:

- improve the quality of care without increasing spending;
- reduce spending without reducing the quality of care; or
- improve the quality of care and reduce spending
- ~~significantly improve outcomes with higher spending~~

# But an APM Could Encourage Use of Treatment #2

$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$



	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
				
<b>Treatment #2</b>	7 Year Survival	\$30,000	0.23 Year/ \$1000	<b>Yes</b>
				
Treatment #3	20 Year Survival	\$55,000	0.36 Year/ \$1000	<b>No</b>

**An Alternative Payment Model (APM) under MACRA must:**

- improve the quality of care without increasing spending;
- reduce spending without reducing the quality of care; or
- improve the quality of care and reduce spending
- ~~significantly improve outcomes with higher spending~~

# CMS Is Only Interested in APMs That Will *Reduce Spending*

~~$$\text{VALUE} = \frac{\text{QUALITY}}{\text{COST}}$$~~

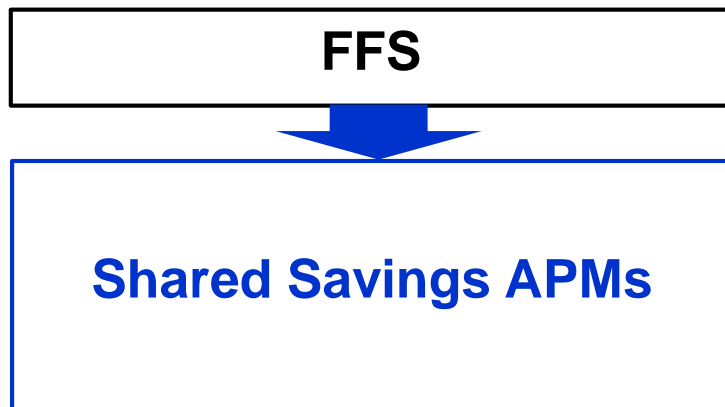
	QUALITY	COST	“VALUE”	APM?
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
				
<b>Treatment #2</b>	7 Year Survival	\$30,000	0.23 Year/ \$1000	<b>Yes</b>
				
Treatment #3	20 Year Survival	\$55,000	0.36 Year/ \$1000	<b>No</b>

**An Alternative Payment Model (APM) under MACRA must:**

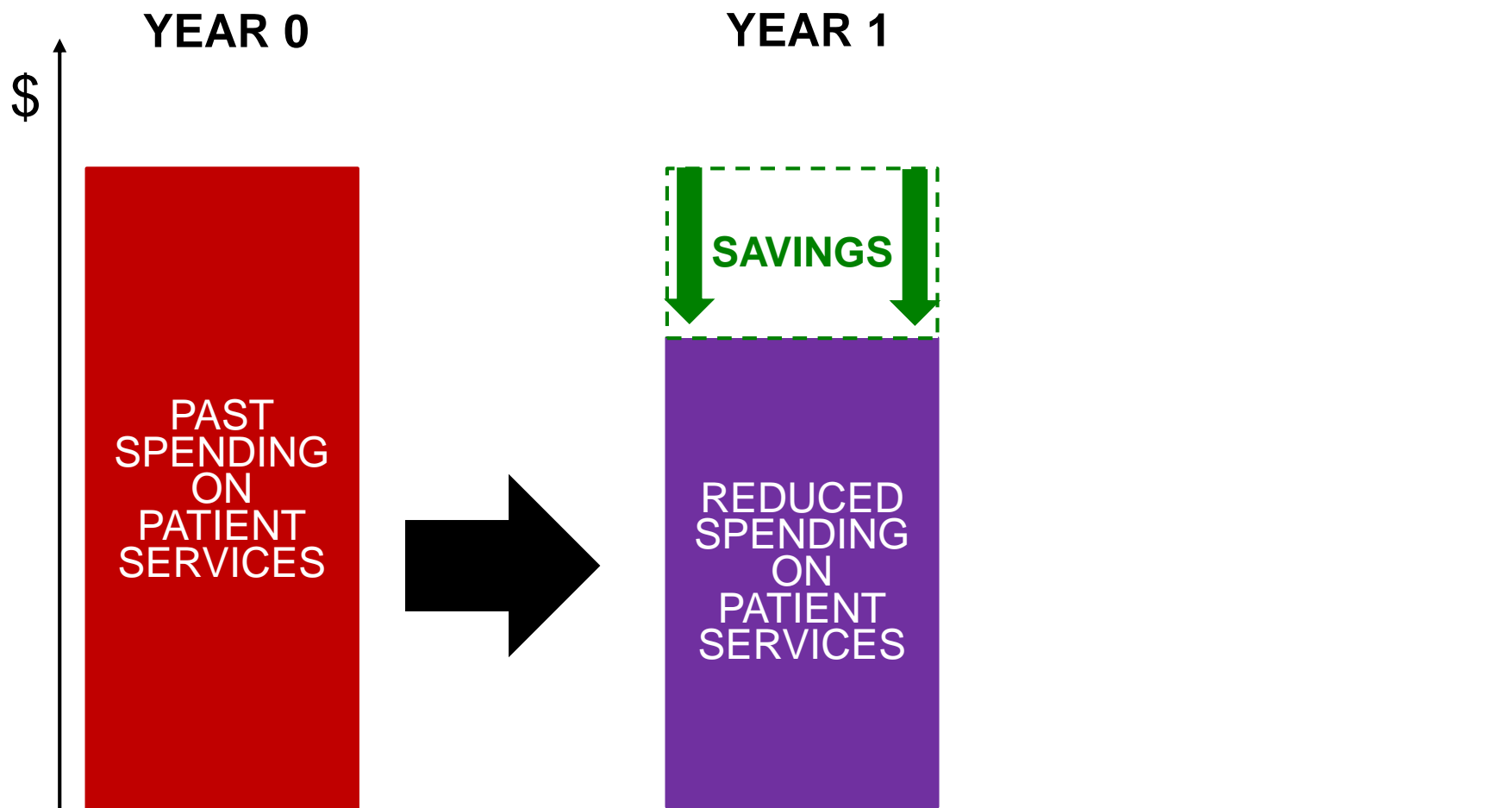
- ~~• improve the quality of care without increasing spending;~~
- **reduce spending** without reducing the quality of care; or
- improve the quality of care and **reduce spending**
- ~~• significantly improve outcomes with higher spending~~

# CMS APMs to Reduce Spending: Version 1

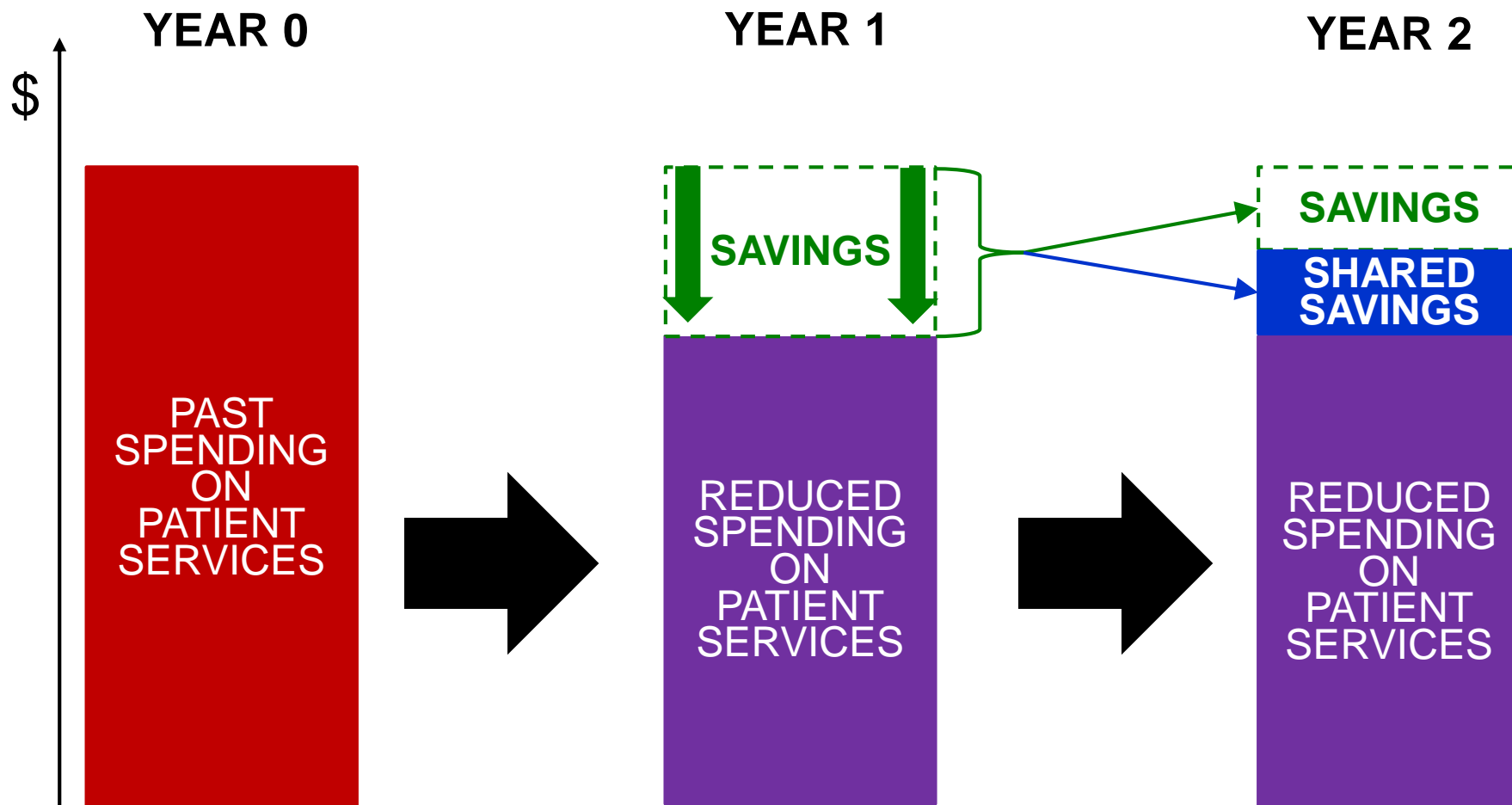
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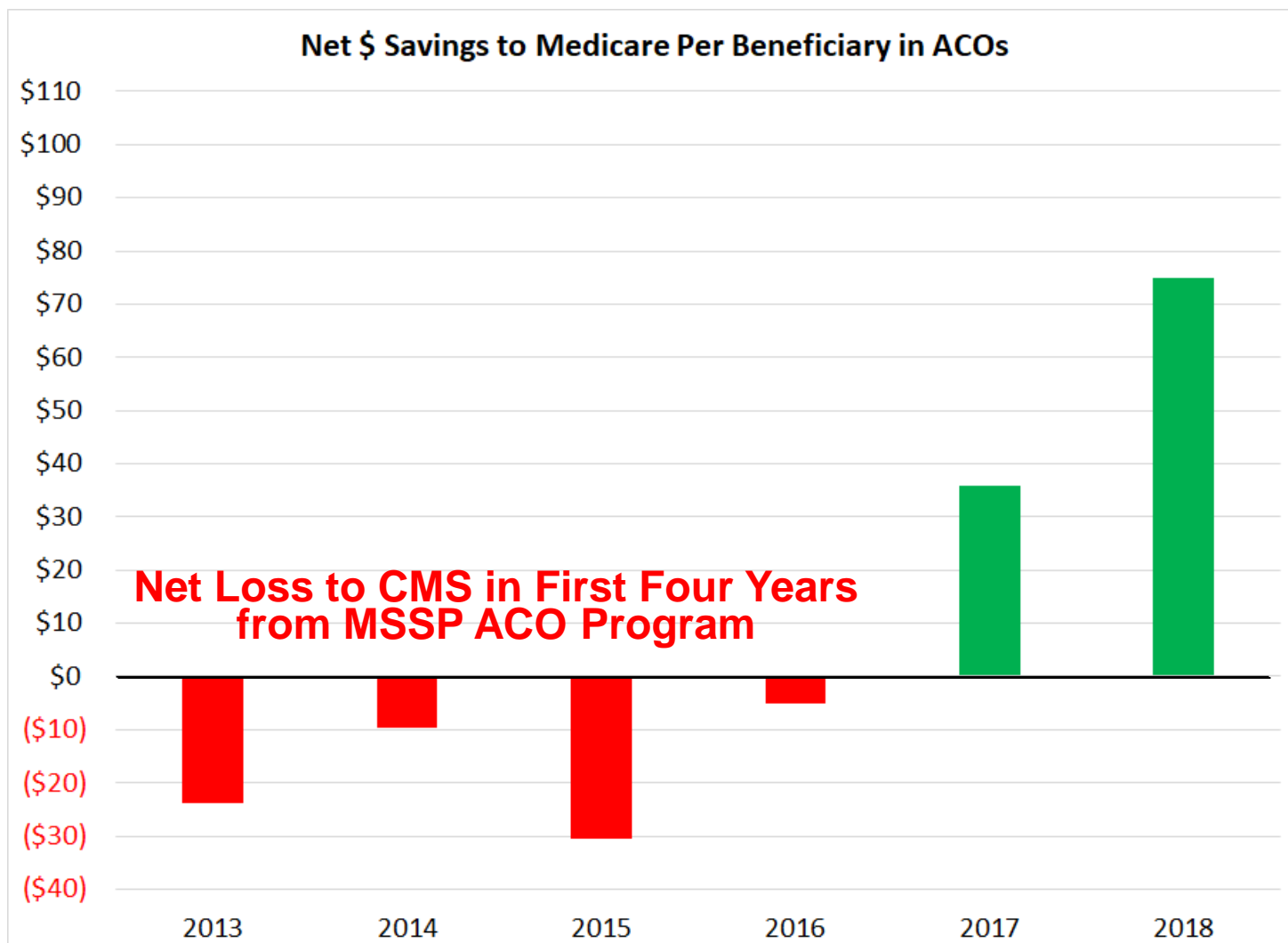
# The “Shared Savings Model”: If You Save CMS \$ in Year 1...



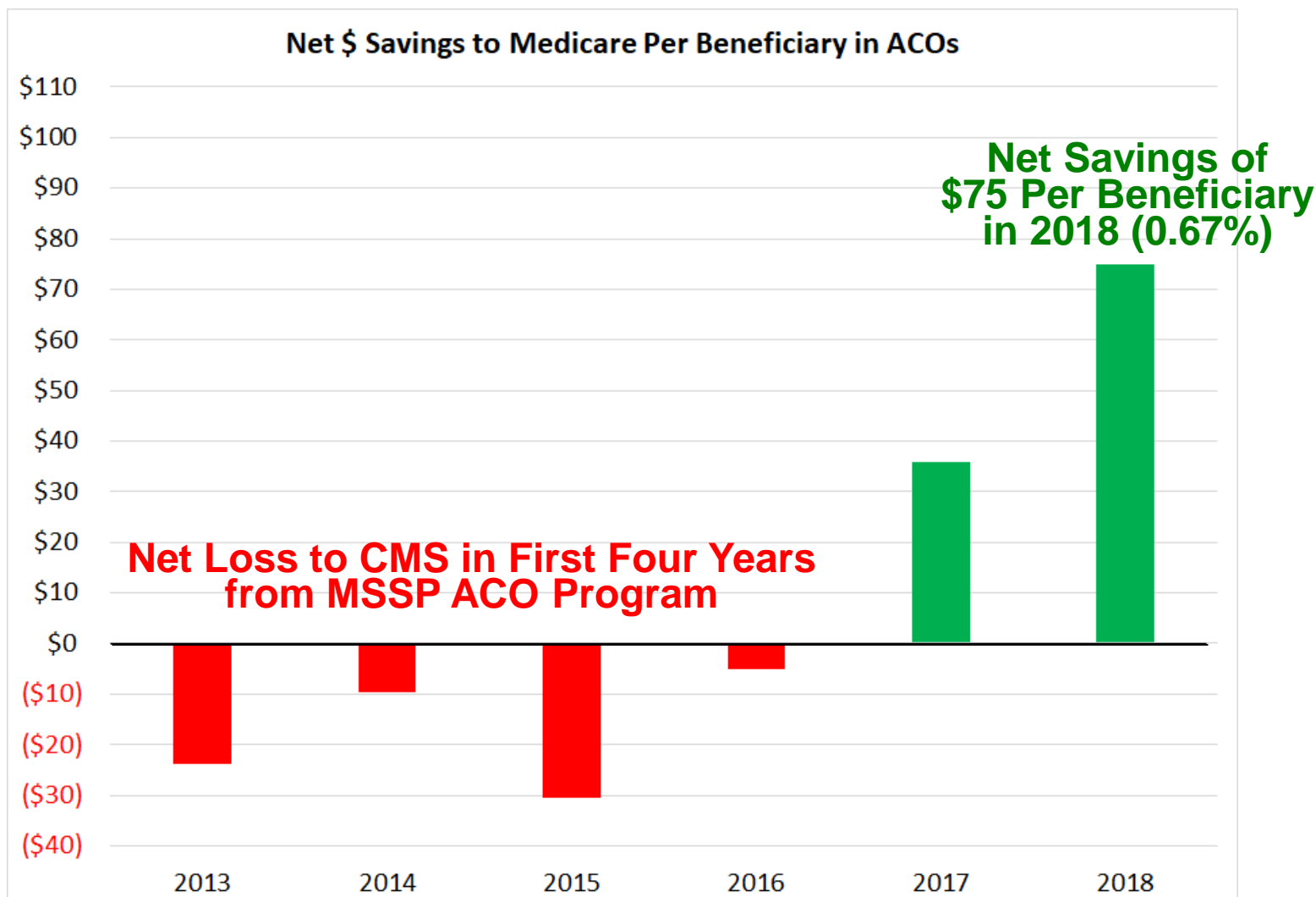
# ...CMS Will Give You a Bonus in Year 2 (Maybe)



# The “Shared Savings” Approach Hasn’t Worked Very Well

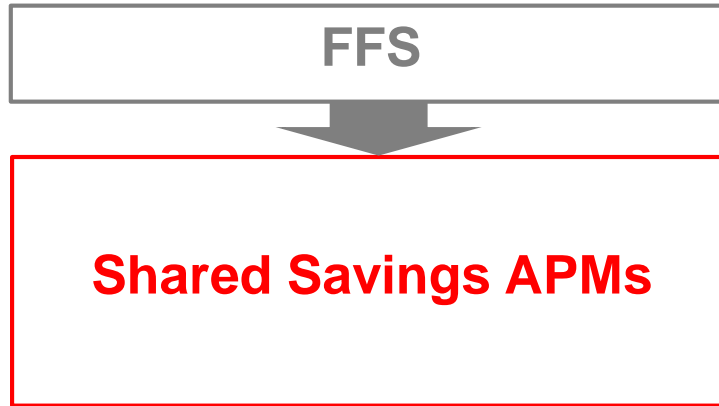


# Extremely Small Amounts When Savings Are Achieved



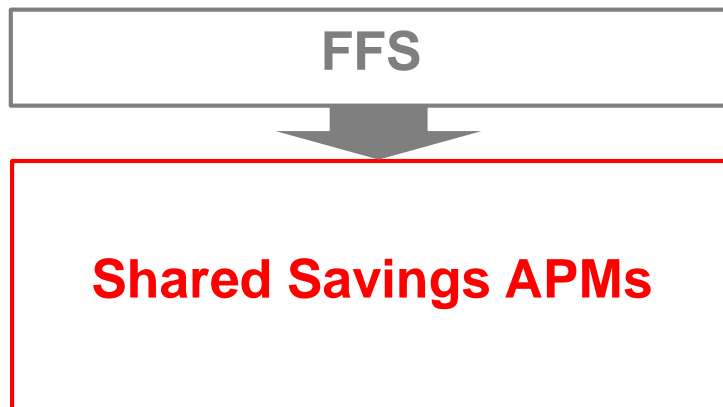


# Why “Shared Savings” Doesn’t Work



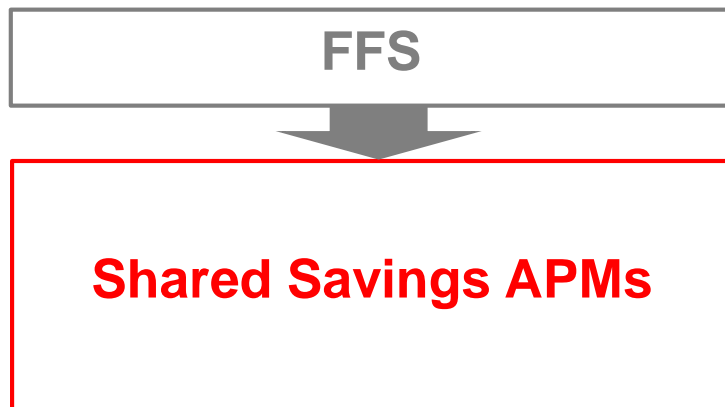
- No new payments for services that could help reduce spending

# Why “Shared Savings” Is Bad for Patients



- No new payments for services that could help reduce spending
- Bonuses for savings regardless of how they are achieved

# The Only Strength: No Downside Risk



- No new payments for services that could help reduce spending
- Bonuses for savings regardless of how they are achieved
- No downside risk if spending increases

# A Better APM Would Fix the Weaknesses

FFS



**Shared Savings APMs**

- No new payments for services that could help reduce spending
- Bonuses for savings regardless of how they are achieved
- No downside risk if spending increases



**Better APMs**

- Adequate payments for high-value services, not bonuses based on savings
- No downside risk if spending increases

# But CMS and Other Payers Think the Answer is More “Risk”

FFS



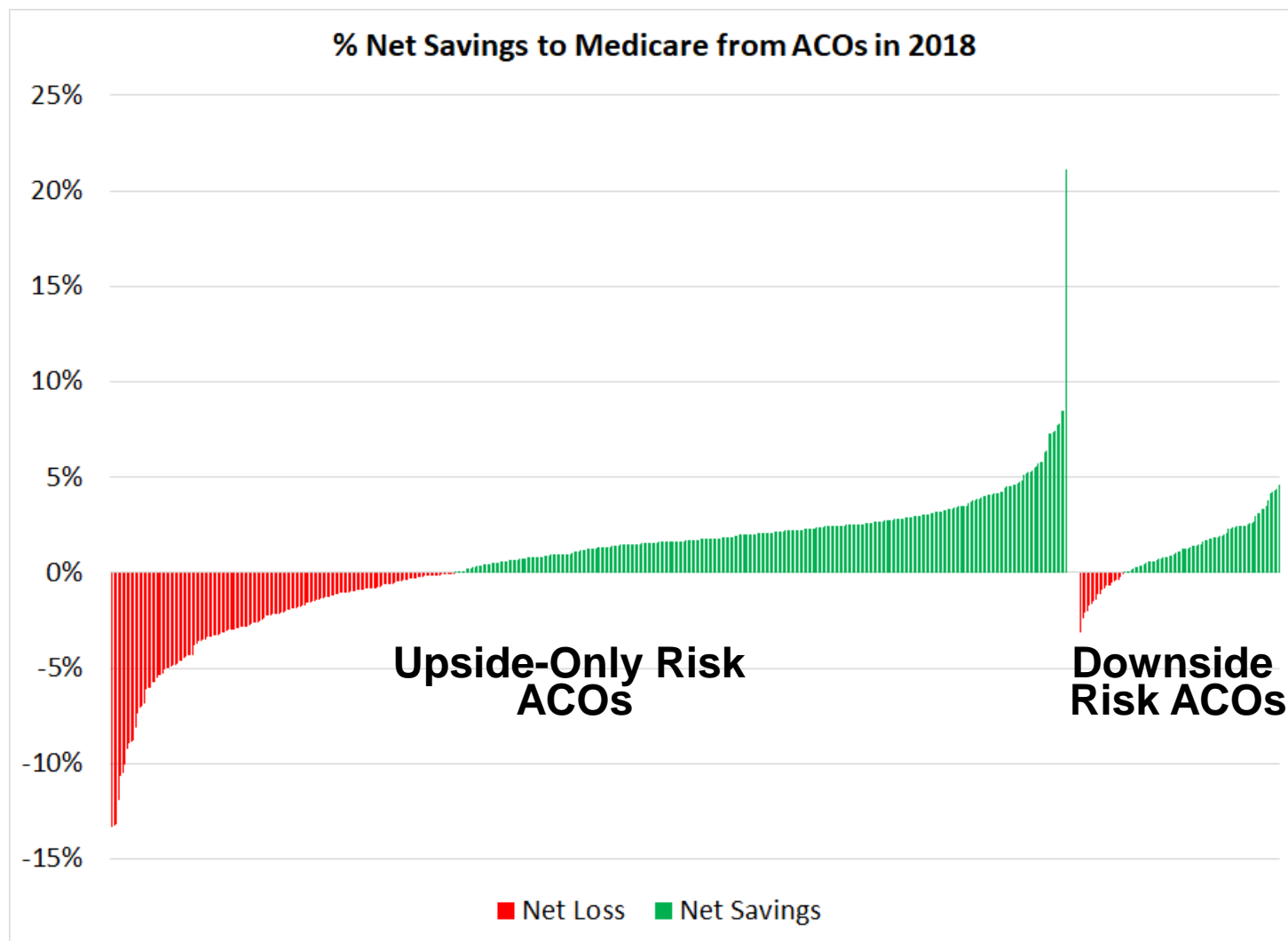
**Shared Savings APMs**



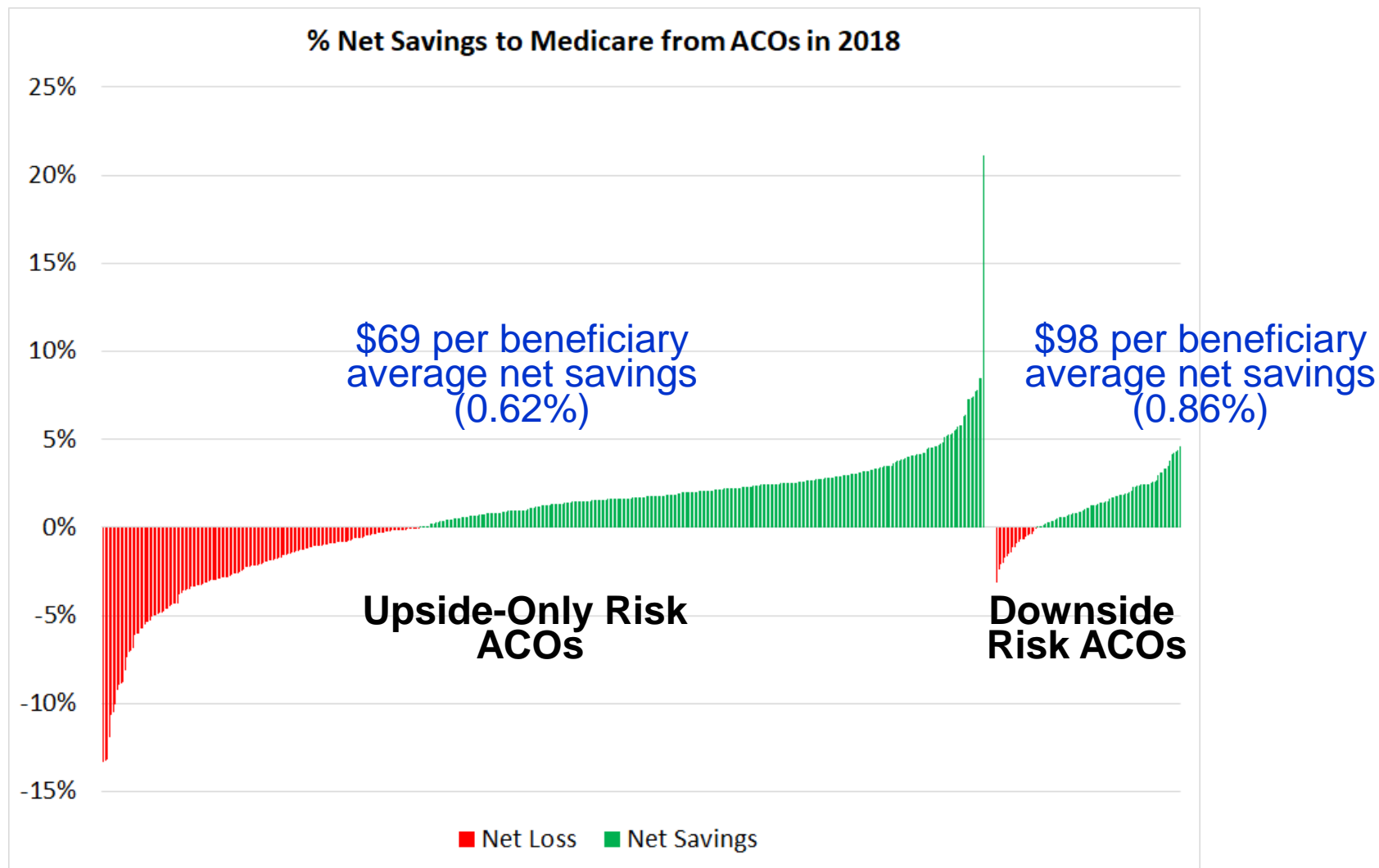
**Downside Risk APMs**

- No new payments for services that could help reduce spending
- Bonuses for savings regardless of how they are achieved
- No downside risk if spending increases
- No new payments for services that could help reduce spending
- Bonuses for savings regardless of how they are achieved
- **Downside risk if spending increases**

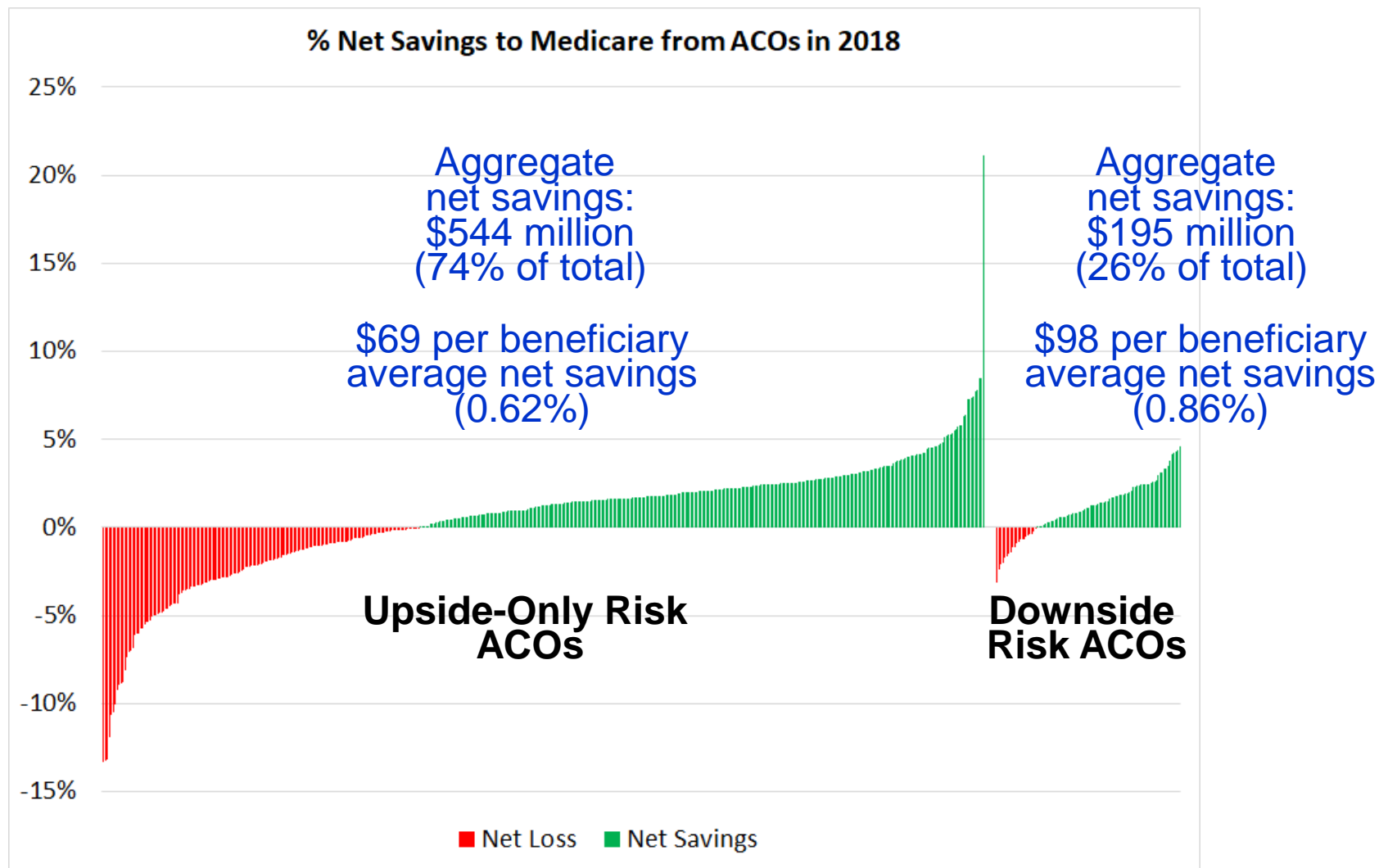
# Do Downside Risk ACOs Save More Than Upside Risk ACOs?



# Do Downside Risk ACOs Save More Than Upside Risk ACOs?

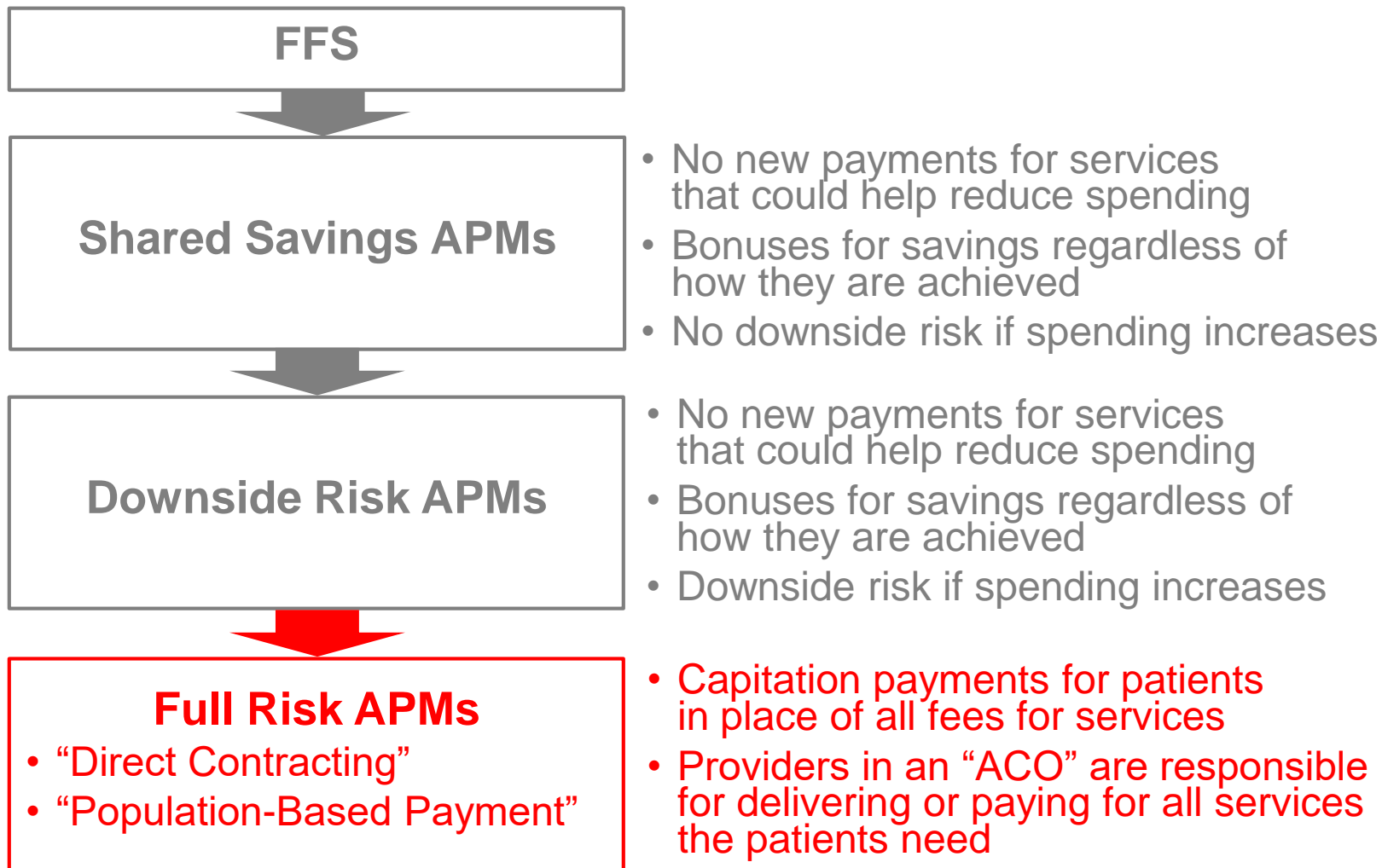


# Majority of Savings Has Come From the Upside-Only ACOs





# CMS's Goal: Full Risk for Providers



# CMS Goal: Eliminate Fees and Give Full Risk to Providers

Shared S

Shared S

Downsid



**Adam Boehler** @AdamUSDFC

6d

Great ear Kate! By 2025, nearly 100% of America will be in outcome-based or full accountability arrangements (like DC), effectively ending fee for service as we know it. This is based on models that are already introduced and starting over the next two years. @CMSinnovates team [twitter.com/katedelisle/st...](https://twitter.com/katedelisle/status/1234567890)



for services  
duce spending  
gs regardless of  
eved  
if spending increases

s for services  
duce spending  
gs regardless of  
eved  
pending increases

## Full Risk APMs

- “Direct Contracting”
- “Population-Based Payment”

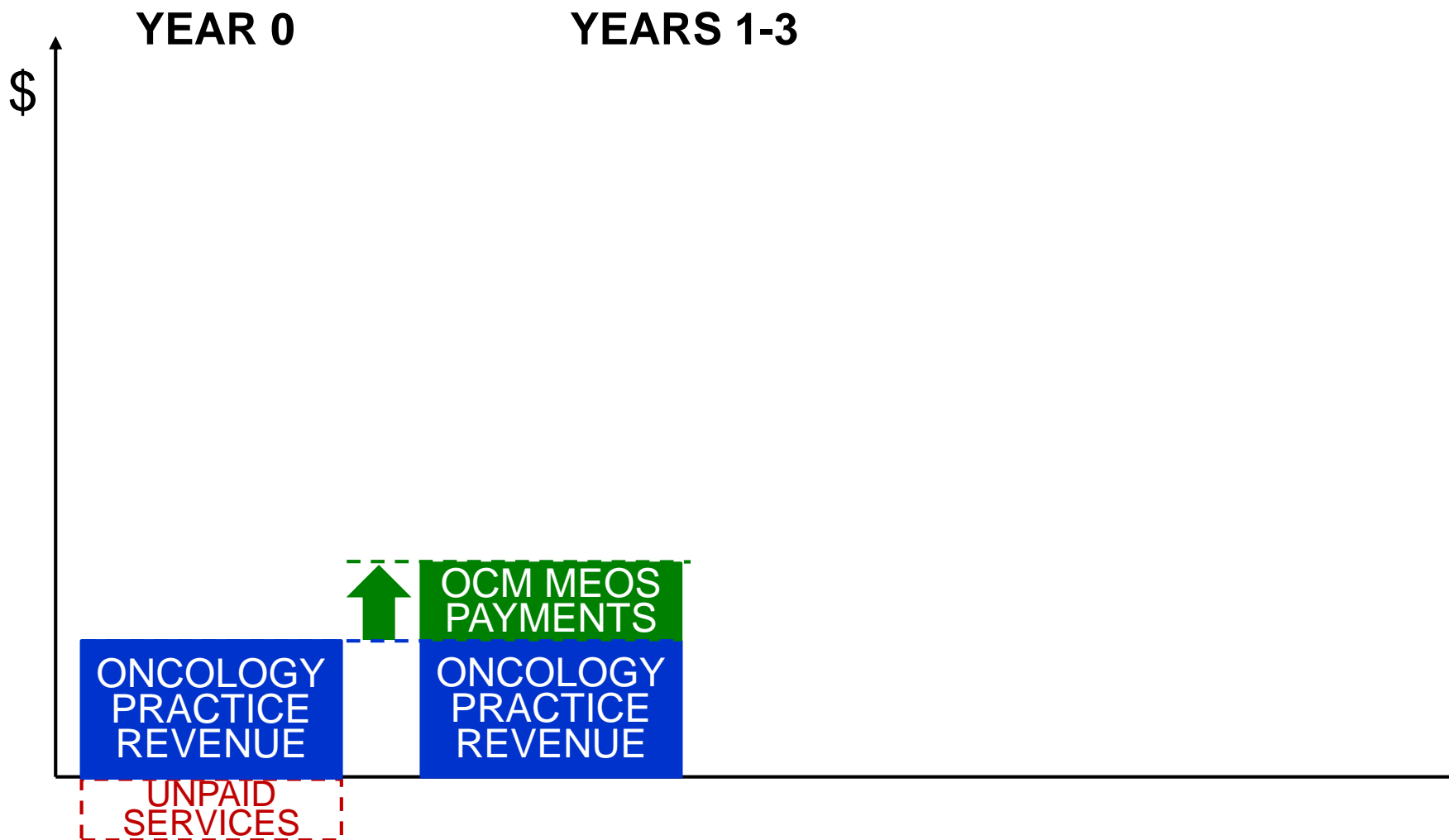
- Capitation payments for patients in place of all fees for services
- Providers in an “ACO” are responsible for delivering or paying for all services the patients need

# “Value-Based” APMs in Oncology

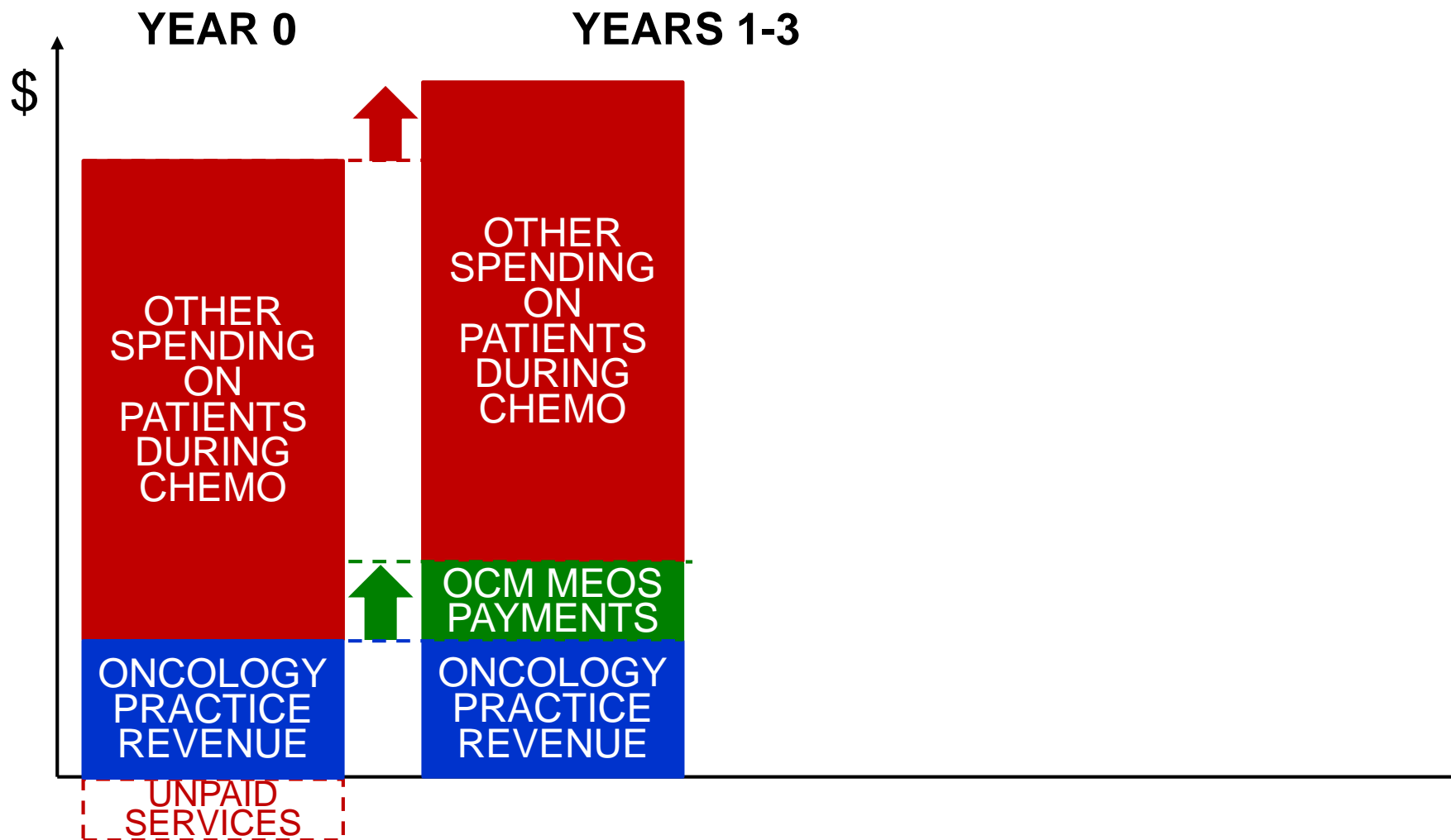
# CMS Oncology Care Model for Medical Oncology (OCM)



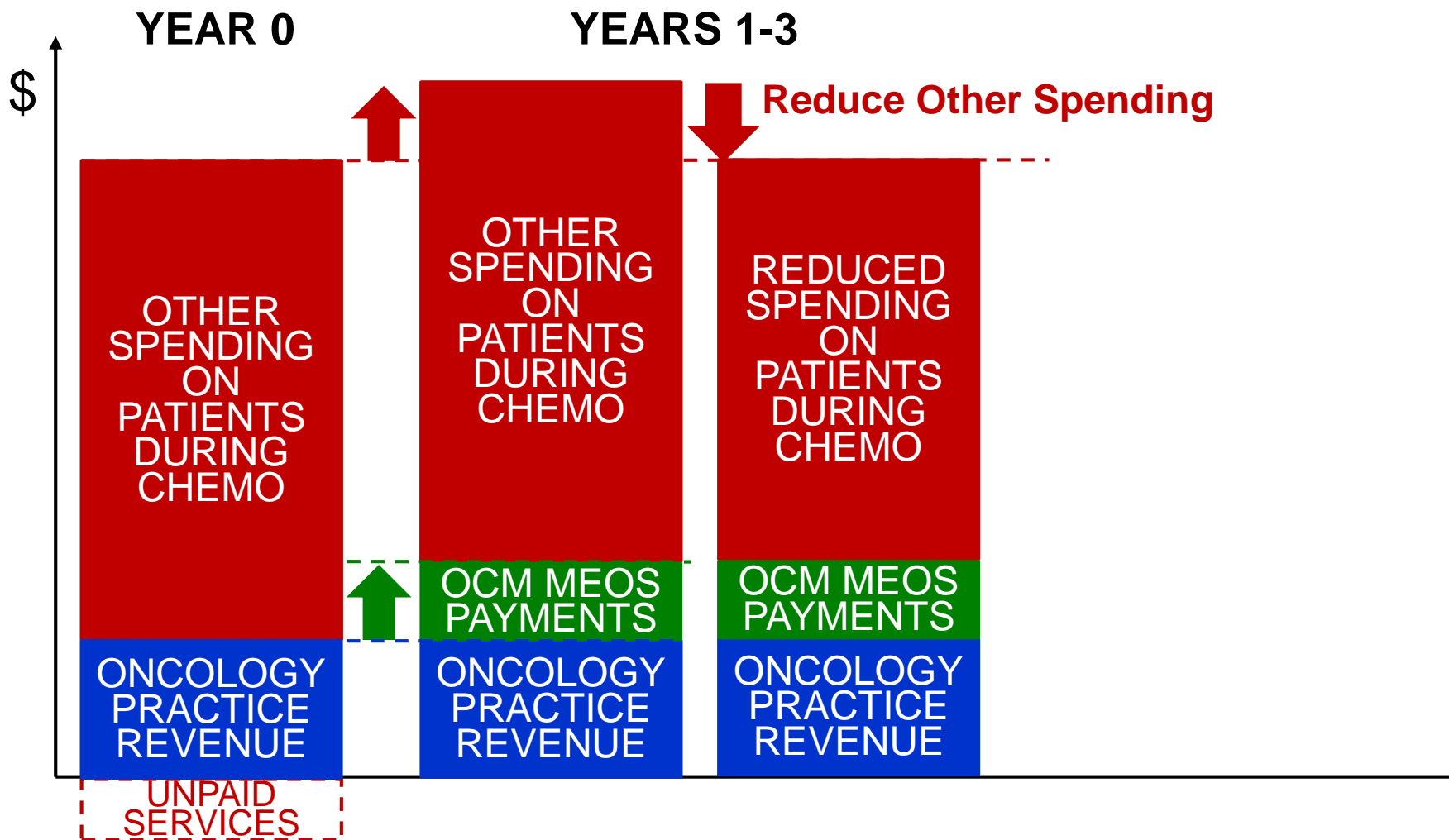
# OCM Provides New Payments to Oncology Practices



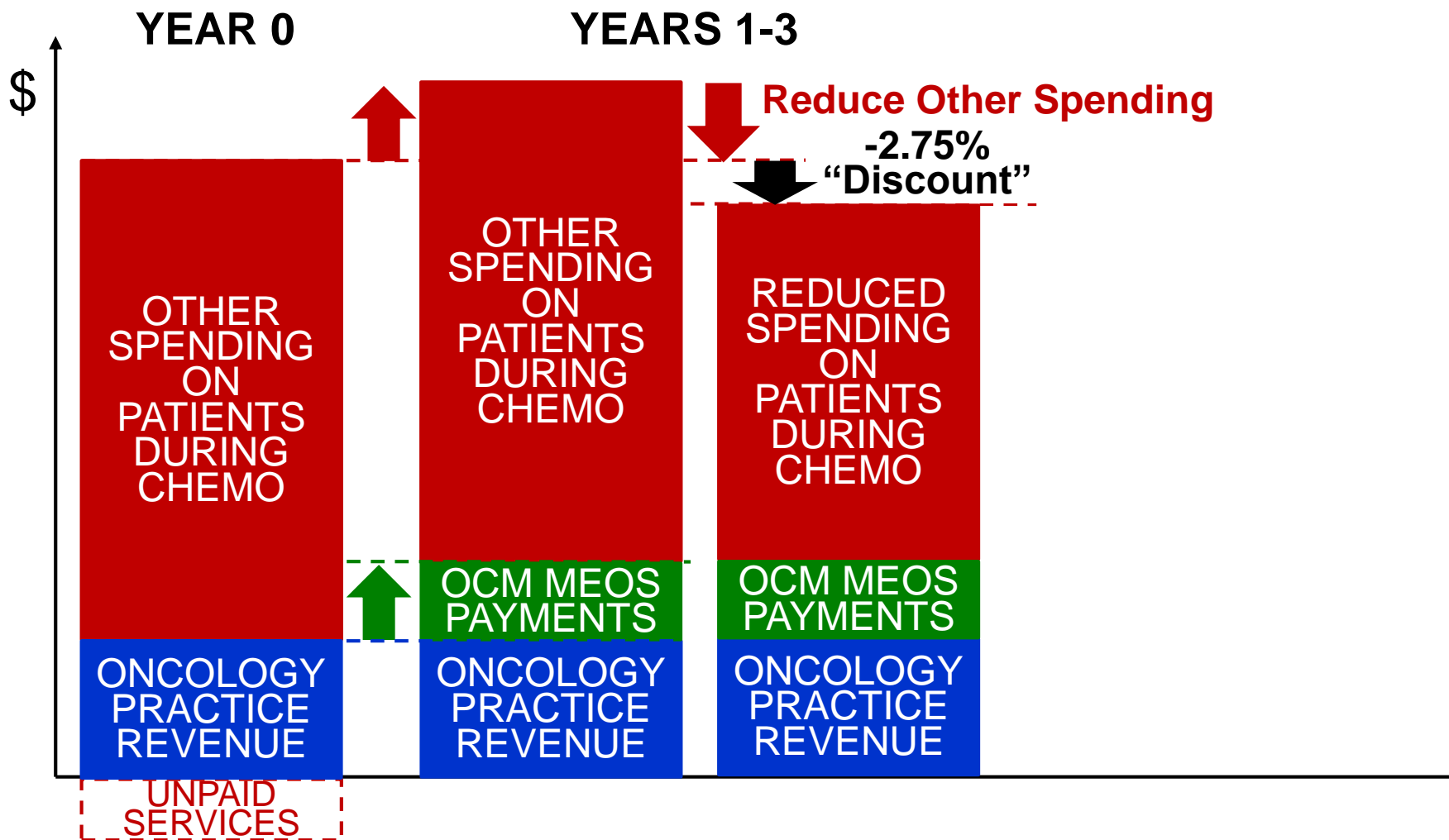
# Since Higher Payments Aren't Budget Neutral for CMS...



# ...CMS Wants the Practice to Find Savings to Offset the Payments...

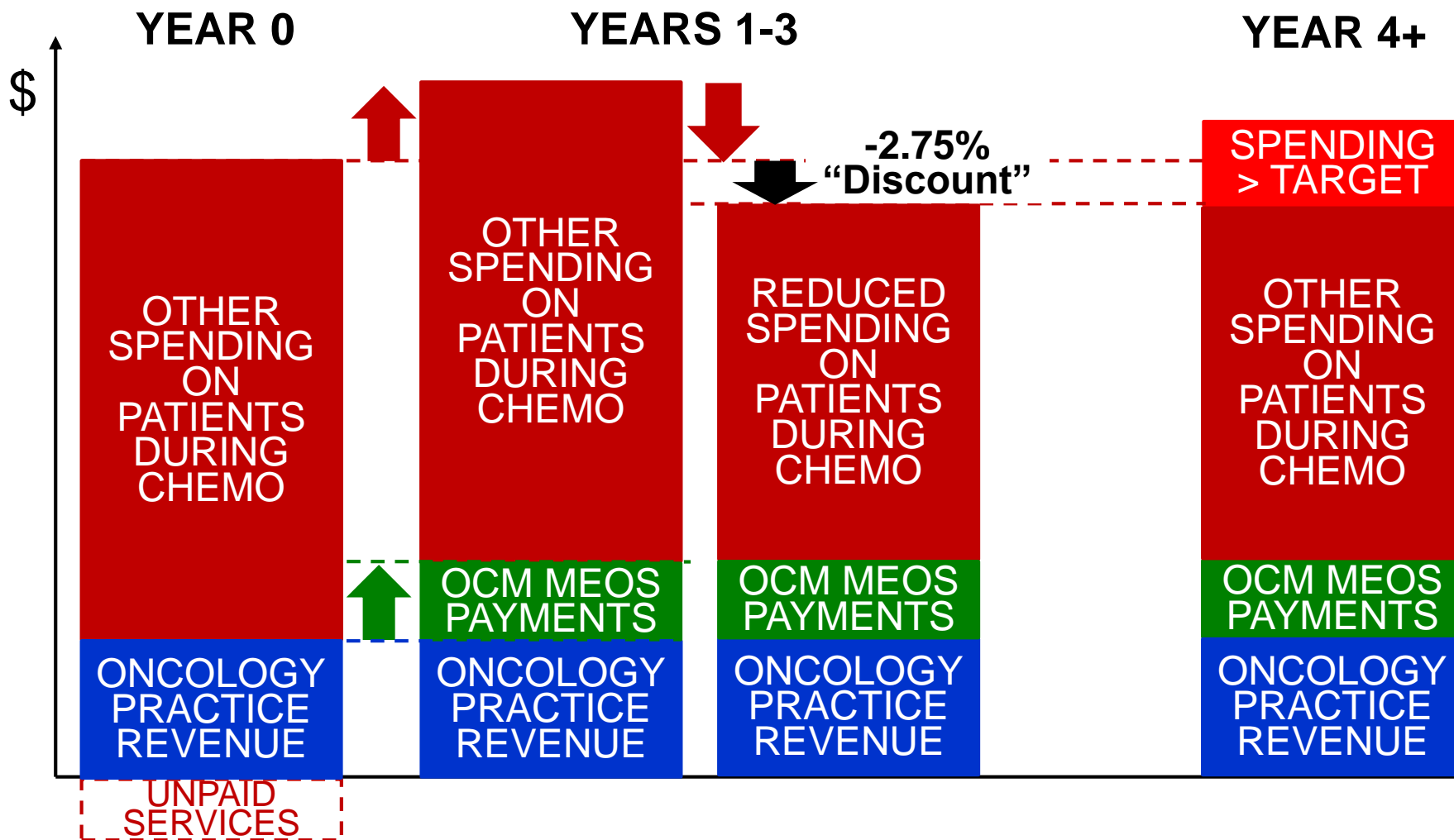


# ... Plus a 2.75% “Discount,” So CMS Actually Spends Less

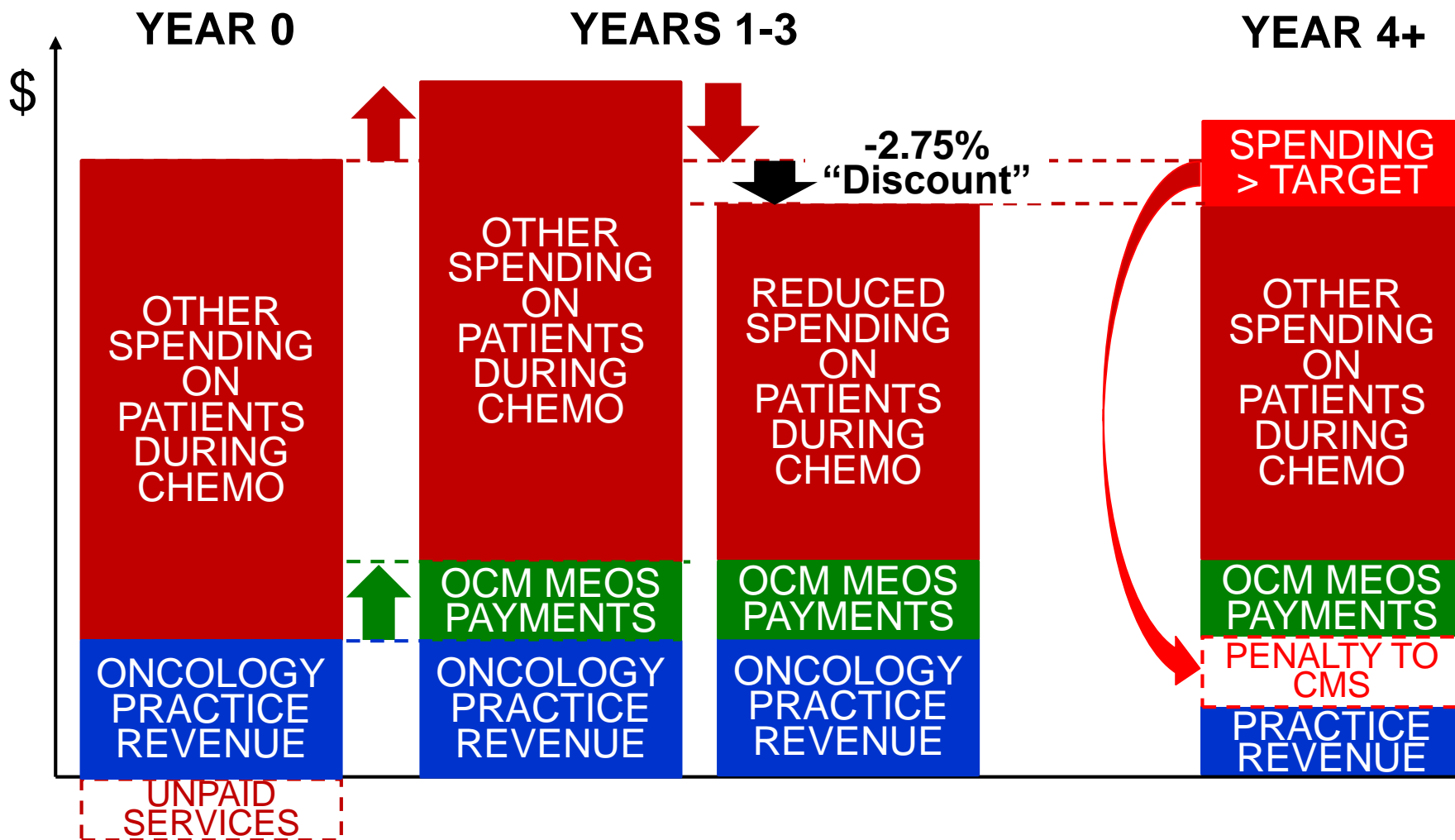




# Starting in Year 4, If the Practice Doesn't Achieve The Savings...



# ...The Practice Has to Pay CMS Out of The Practice's Revenues



# Although CMS “Risk Adjusts” Total Spending to Set Targets...

## Adjustment Factors Used to Adjust Total Spending

- Sex
- Age
- Type of Cancer (Breast, Colon, Lung, Prostate, etc.)
- Number of Chronic Diseases
- Resident of a Nursing Facility?
- Prior Chemotherapy?
- Received Surgery?
- Receiving Radiation?
- Bone Marrow Transplant?
- Clinical Trial Participant?
- High Percentage of Patients Receiving “Novel Therapies”?

# ..CMS Fails to Adjust for the Most Important Factors Driving Costs

## Adjustment Factors Used to Adjust Total Spending

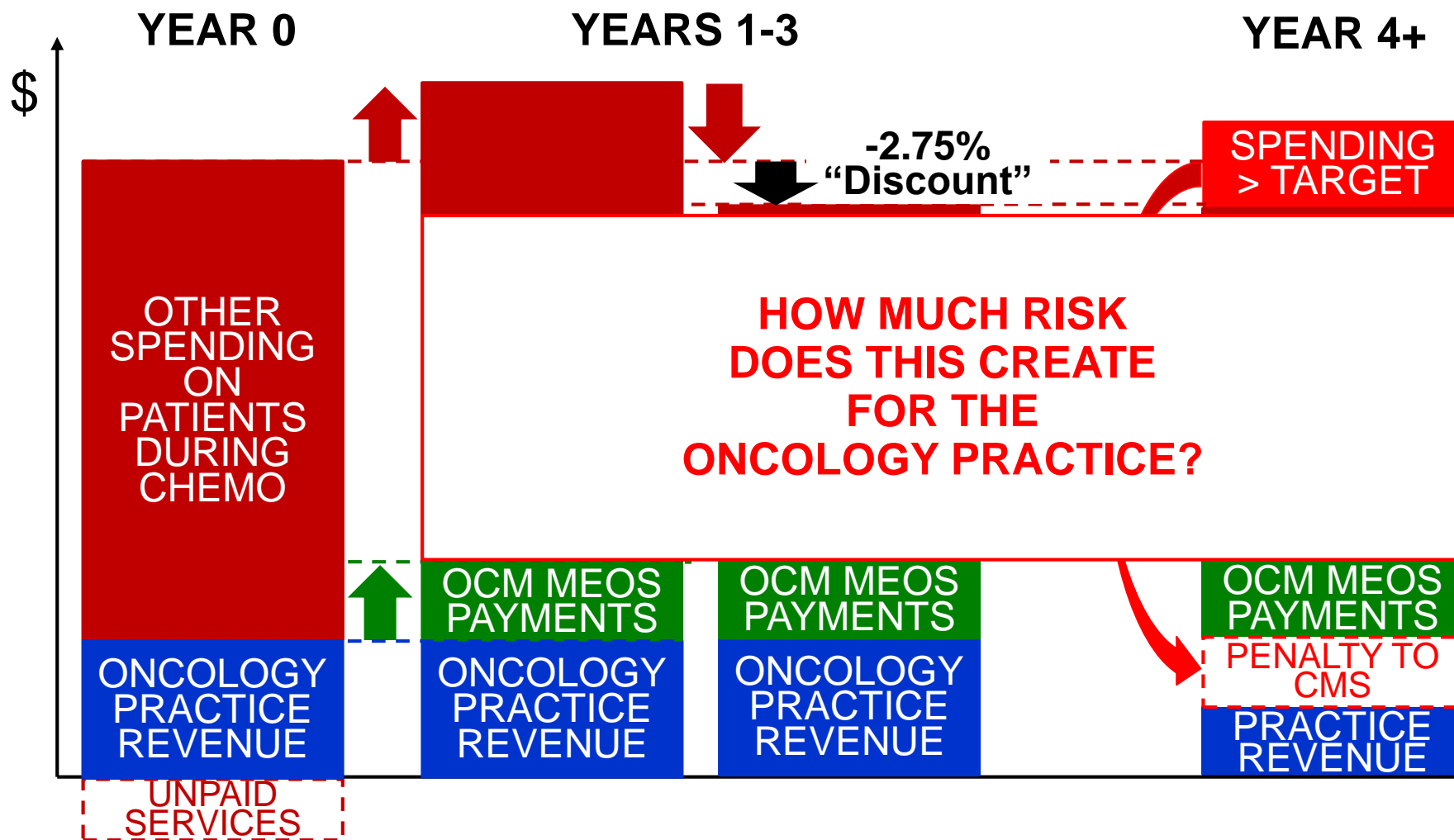
- Sex
- Age
- Type of Cancer (Breast, Colon, Lung, Prostate, etc.)
- Number of Chronic Diseases
- Resident of a Nursing Facility?
- Prior Chemotherapy?
- Received Surgery?
- Receiving Radiation?
- Bone Marrow Transplant?
- Clinical Trial Participant?
- High Percentage of Patients Receiving “Novel Therapies”?

## Factors Driving Spending That Are NOT Adjusted For

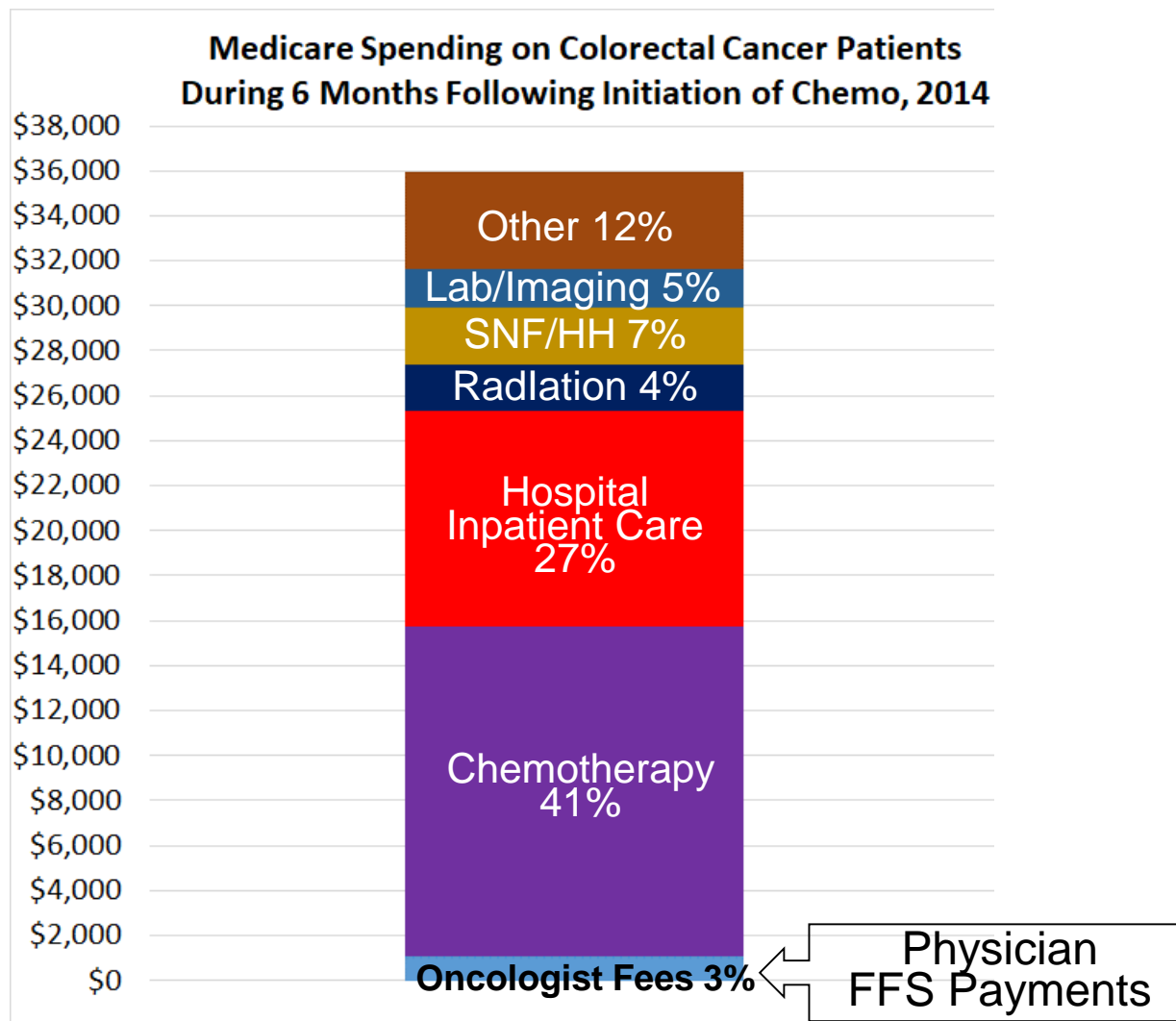
- Molecular Subtype of Cancer
- Stage of Cancer
- Line of Therapy
- Toxicity of Drugs
- Complexity of Oral Regimen
- Patient Performance Status
- Price Changes of Drugs



# Result: Practice is At Risk For Things It Cannot Control

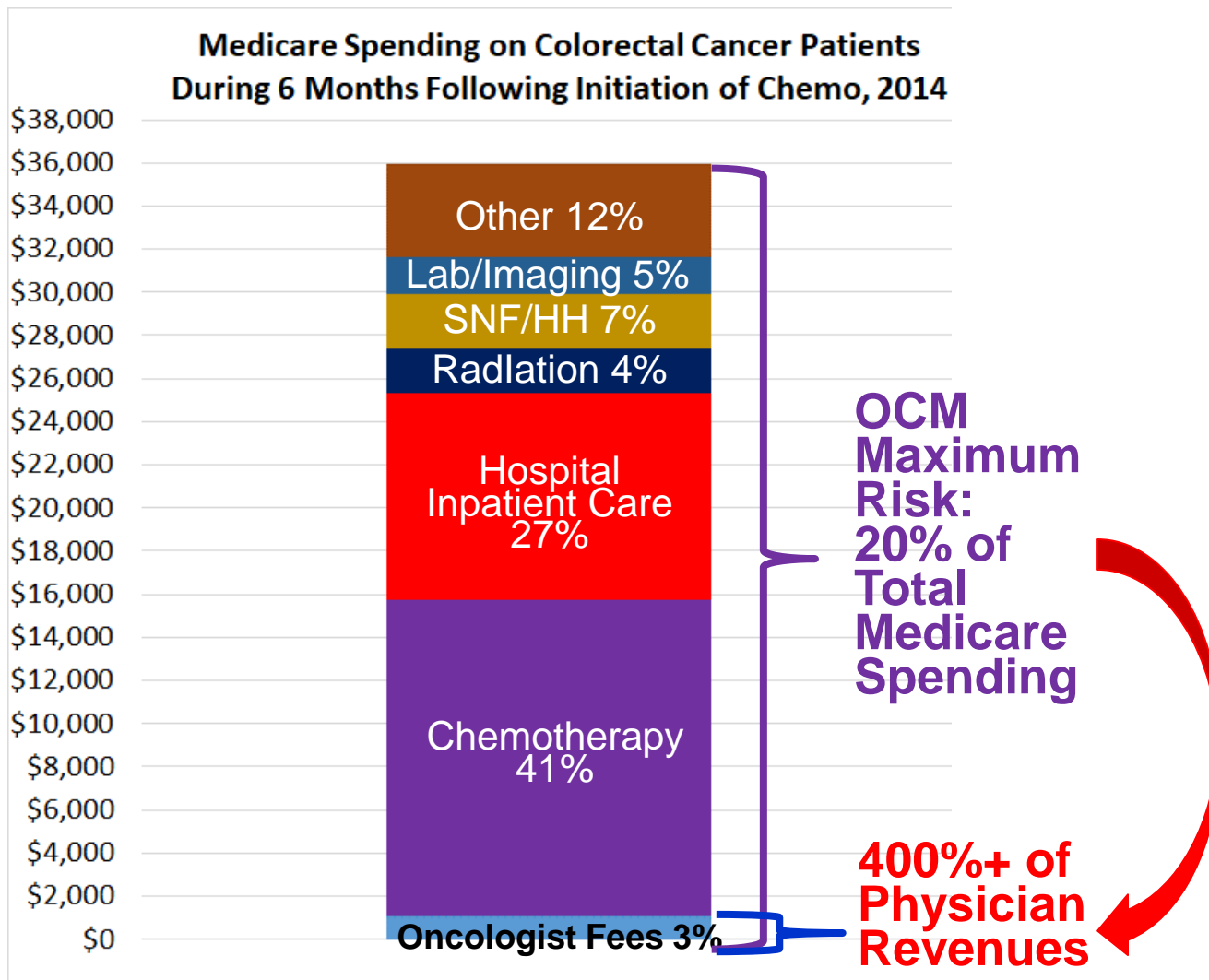


# <5% of Spending During Chemo Goes to Oncology Practice Fees



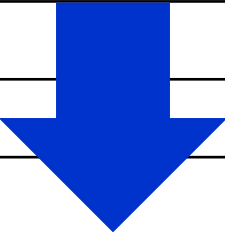
# 20% Total Spending Risk in OCM

## >4x Oncologists' Fee Revenue






# The Oncology Care Model (OCM) Penalizes Higher-Value Care

	QUALITY	COST	“VALUE”	OCM
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
				
Treatment #3	20 Year Survival	\$55,000	0.36 Year/ \$1000	<b>Penalty</b>

# OCM Rewards Reductions in Spending

	<b>QUALITY</b>	<b>COST</b>	<b>“VALUE”</b>	<b>OCM</b>
Treatment #1	10 Year Survival	\$50,000	0.20 Year/ \$1000	
				
Treatment #2	7 Year Survival	\$30,000	0.23 Year/ \$1000	<b>Reward</b>
Treatment #3	20 Year Survival	\$55,000	0.36 Year/ \$1000	<b>Penalty</b>

# OCM Financial Risk for Cost But Not for *Outcomes*

## OCM Quality Measures

- All-cause hospital admission rate
- All-cause ED visits/observation stays
- % of deaths in hospice >3 days
- Pain assessment and management
- Screening for depression & follow-up
- Patient-reported experience
- Hormonal therapy for high-risk prostate cancer
- Adjuvant chemo for AJCC III colon cancer
- Combination chemo for AJCC T1cNOMO or Stage IB-III hormone receptor negative breast cancer
- Trastuzumab for AJCC T1b-IIIc ER/PR+ breast cancer
- Documentation of medications

## NO Measures to Assure:

- Good outcomes for any type of cancer

# OCM Financial Risk for Total Cost But Not for Total *Quality* of Care

## OCM Quality Measures

- All-cause hospital admission rate
- All-cause ED visits/observation stays
- % of deaths in hospice >3 days
- Pain assessment and management
- Screening for depression & follow-up
- Patient-reported experience
- Hormonal therapy for high-risk prostate cancer
- Adjuvant chemo for AJCC III colon cancer
- Combination chemo for AJCC T1cNOMO or Stage IB-III hormone receptor negative breast cancer
- Trastuzumab for AJCC T1b-IIIc ER/PR+ breast cancer
- Documentation of medications

## NO Measures to Assure:

- Good outcomes for any type of cancer
- Evidence-based treatment for lung cancer
- Evidence-based treatment for liver cancer
- Evidence-based treatment for melanoma
- Evidence-based treatment for leukemia
- Evidence-based treatment for lymphoma
- Evidence-based treatment for bladder cancer
- Evidence-based treatment for ovarian cancer
- Evidence-based treatment for other kinds of cancer and metastatic cancer

# CMS's Proposed Radiation Oncology Model

- **Bundled Payments for Radiation Therapy Instead of Current Fees**
  - Eliminate separate payments for 100+ CPT/HCPCS codes
  - Pay a single amount for all radiation therapy services during a 90-day “episode”
  - Payment amount based on actual average episode spending in previous years
- **Limited Adjustment of Payments Based on Patient Needs**
  - Separate payments for 17 different types of cancer
  - Unspecified “case mix adjustment” based on claims, not clinical data
  - Additional adjustment based on problematic measure of provider “efficiency”
- **No Adjustments for Changes in Evidence or Technology**
- **Reductions in Payments Compared to Current Spending**
  - Payments reduced by arbitrary 4-5% “discount” to produce savings
  - Additional 2% of payments withheld until quality measures are calculated; only a portion of the withhold would be returned
  - Likely total net reduction in payments of >5% compared to past
- **Participation is mandatory for physician practices and hospitals in 40% of the country even though the model has never been tested and many of the details haven't been specified**

# CMS APMs Are Actually Worse Than FFS

	Adequate Payment for High-Value Services?
<b>Fee for Service</b>	<b>No</b>
<b>Shared Savings APMs</b> <ul style="list-style-type: none"> <li>• Track 1 ACOs</li> <li>• Primary Care</li> </ul>	<b>No</b>
<b>Downside Risk APMs</b> <ul style="list-style-type: none"> <li>• Track 2 ACOs</li> <li>• Episode Models</li> <li>• Oncology Care Model</li> <li>• Radiation Oncology Bundled Payment</li> </ul>	<b>No</b>

# CMS APMs Are Actually Worse Than FFS

	Adequate Payment for High-Value Services?	Rewards for Stinting on Patient Services?
<b>Fee for Service</b>	<b>No</b>	<b>No</b>
<b>Shared Savings APMs</b> <ul style="list-style-type: none"> <li>Track 1 ACOs</li> <li>Primary Care</li> </ul>	<b>No</b>	<b>Yes</b>
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# CMS APMs Are Actually Worse Than FFS

	Adequate Payment for High-Value Services?	Rewards for Stinting on Patient Services?	Penalties for Having Sicker Patients?
<b>Fee for Service</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Shared Savings APMs</b> <ul style="list-style-type: none"> <li>Track 1 ACOs</li> <li>Primary Care</li> </ul>	<b>No</b>	<b>Yes</b>	<b>No</b>
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# CMS APMs Are Actually Worse Than FFS

	Adequate Payment for High-Value Services?	Rewards for Stinting on Patient Services?	Penalties for Having Sicker Patients?	Penalties for Costs Physicians Can't Control?
<b>Fee for Service</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Shared Savings APMs</b> <ul style="list-style-type: none"> <li>Track 1 ACOs</li> <li>Primary Care</li> </ul>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>
<b>Downside Risk APMs</b> <ul style="list-style-type: none"> <li>Track 2 ACOs</li> <li>Episode Models</li> <li>Oncology Care Model</li> <li>Radiation Oncology Bundled Payment</li> </ul>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>

# Value-Based Payment Is Being Designed the *Wrong Way* Today

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## **TOP-DOWN PAYMENT REFORM**

**Medicare and  
Health Plans  
Define  
Payment Systems**

# Value-Based Payment Is Being Designed the *Wrong Way* Today

## TOP-DOWN PAYMENT REFORM

Medicare and  
Health Plans  
Define  
Payment Systems



Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems

# Value-Based Payment Is Being Designed the *Wrong Way* Today

## TOP-DOWN PAYMENT REFORM

Medicare and  
Health Plans  
Define  
Payment Systems



Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems



Patients Get Worse Care  
and  
Providers Close/Consolidate

# Is There a Better Way?

## **TOP-DOWN PAYMENT REFORM**

**Medicare and  
Health Plans  
Define  
Payment Systems**

**Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems**

**Patients Get Worse Care  
and  
Providers Close/Consolidate**

# Start By Identifying Ways to Improve Care & Reduce Costs...

## **TOP-DOWN PAYMENT REFORM**

**Medicare and  
Health Plans  
Define  
Payment Systems**



**Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems**



**Patients Get Worse Care  
and  
Providers Close/Consolidate**

## **BOTTOM-UP PAYMENT REFORM**

**Ask Physicians and Hospitals  
to Identify Ways to  
Improve Care for Patients  
and Eliminate Avoidable Costs**

# ...Pay Adequately & Expect Accountability for Outcomes...

## **TOP-DOWN PAYMENT REFORM**

**Medicare and  
Health Plans  
Define  
Payment Systems**



**Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems**



**Patients Get Worse Care  
and  
Providers Close/Consolidate**

## **BOTTOM-UP PAYMENT REFORM**

**Payers Provide Adequate  
Payment for Quality Care &  
Providers Take Accountability  
for Quality & Efficiency**



**Ask Physicians and Hospitals  
to Identify Ways to  
Improve Care for Patients  
and Eliminate Avoidable Costs**



# ...So the Result is Better, More Affordable Patient Care

## **TOP-DOWN PAYMENT REFORM**

**Medicare and  
Health Plans  
Define  
Payment Systems**



**Physicians and Hospitals  
Have To Change Care  
to Align With  
Payment Systems**



**Patients Get Worse Care  
and  
Providers Close/Consolidate**

## **BOTTOM-UP PAYMENT REFORM**

**Patients Get Good Care  
at an Affordable Cost and  
Independent Providers  
Remain Financially Viable**



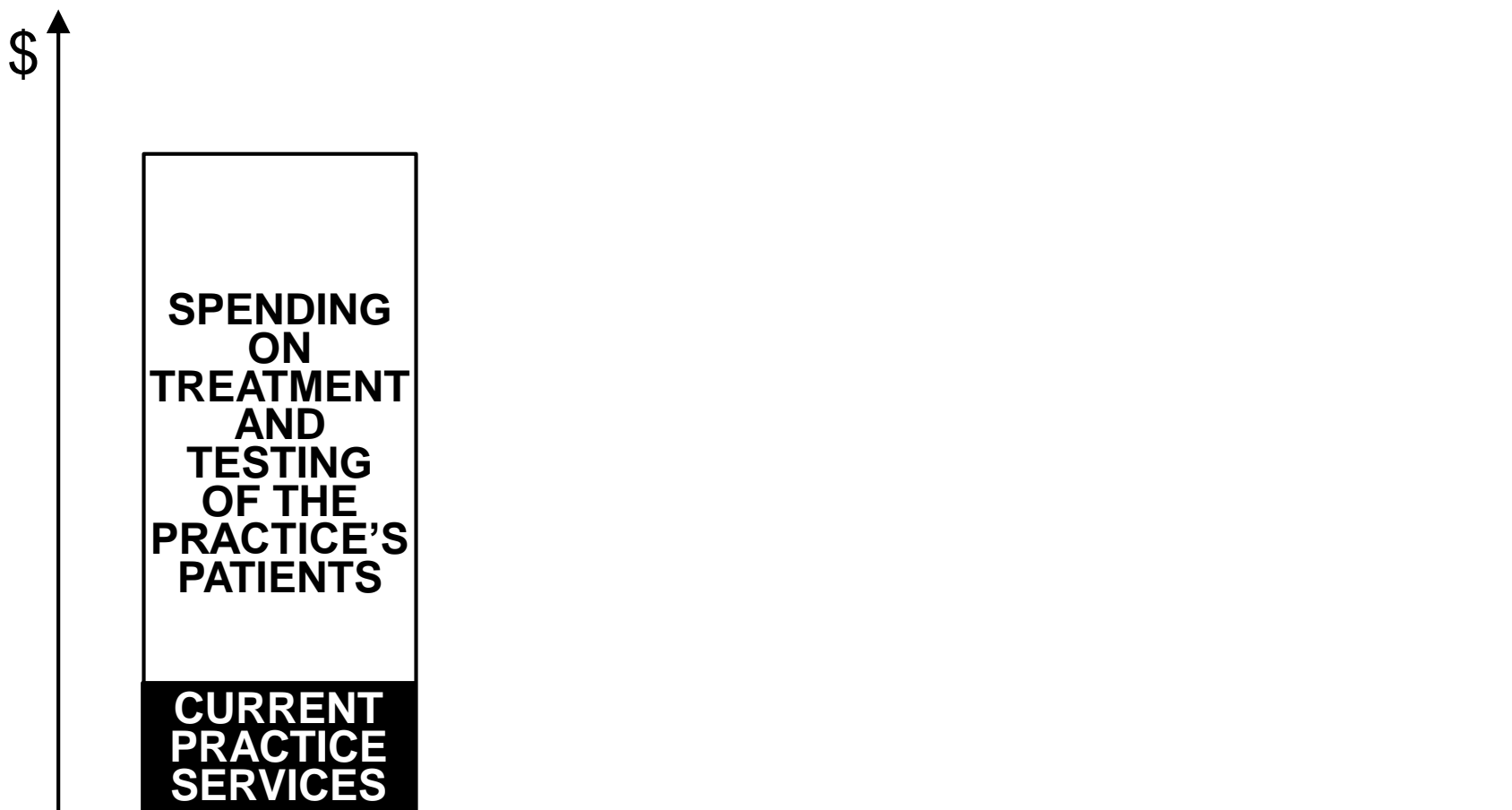
**Payers Provide Adequate  
Payment for Quality Care &  
Providers Take Accountability  
for Quality & Efficiency**



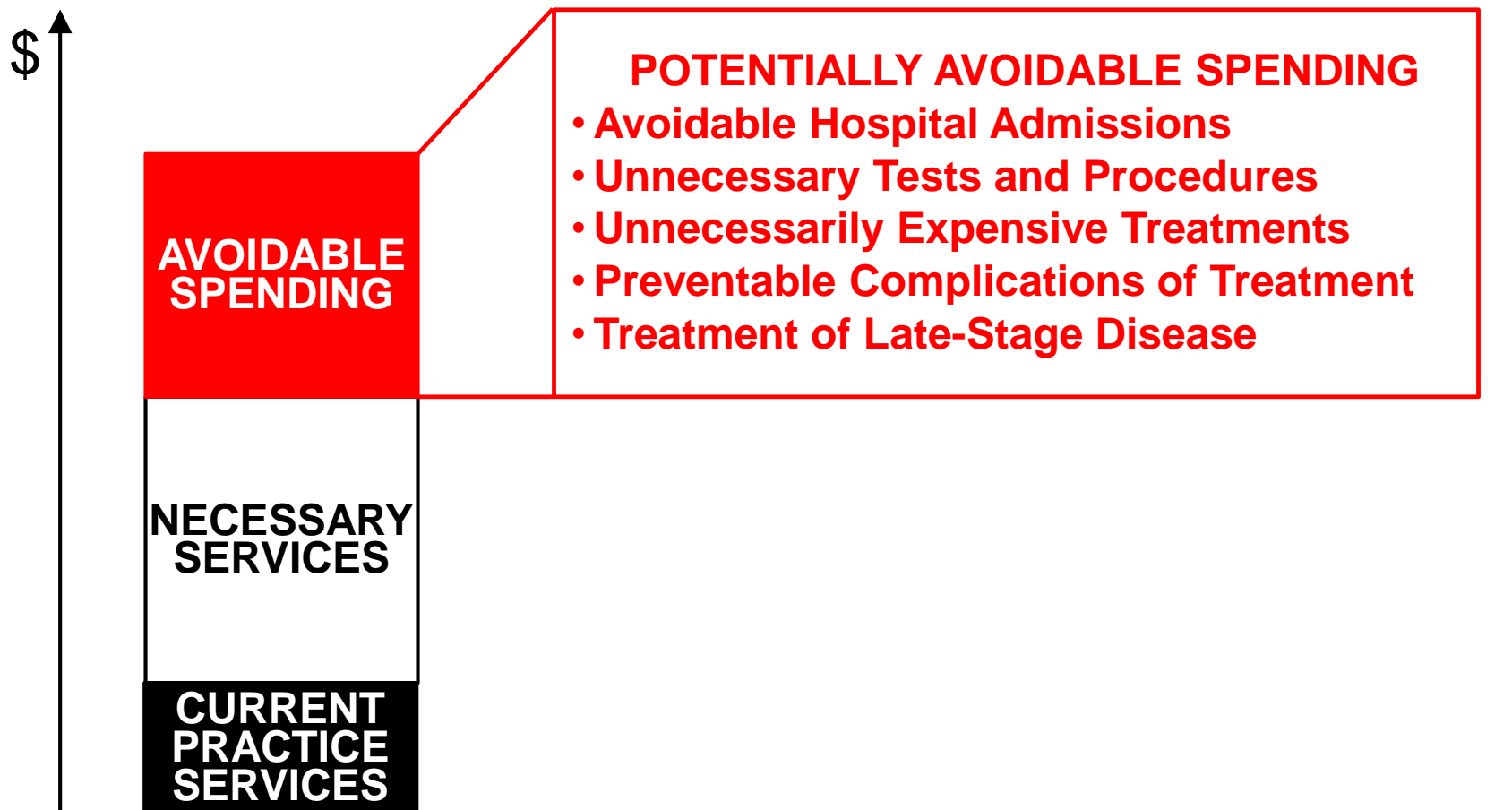
**Ask Physicians and Hospitals  
to Identify Ways to  
Improve Care for Patients  
and Eliminate Avoidable Costs**

How Do You Define  
a *Good Value-Based*  
Alternative Payment Model?

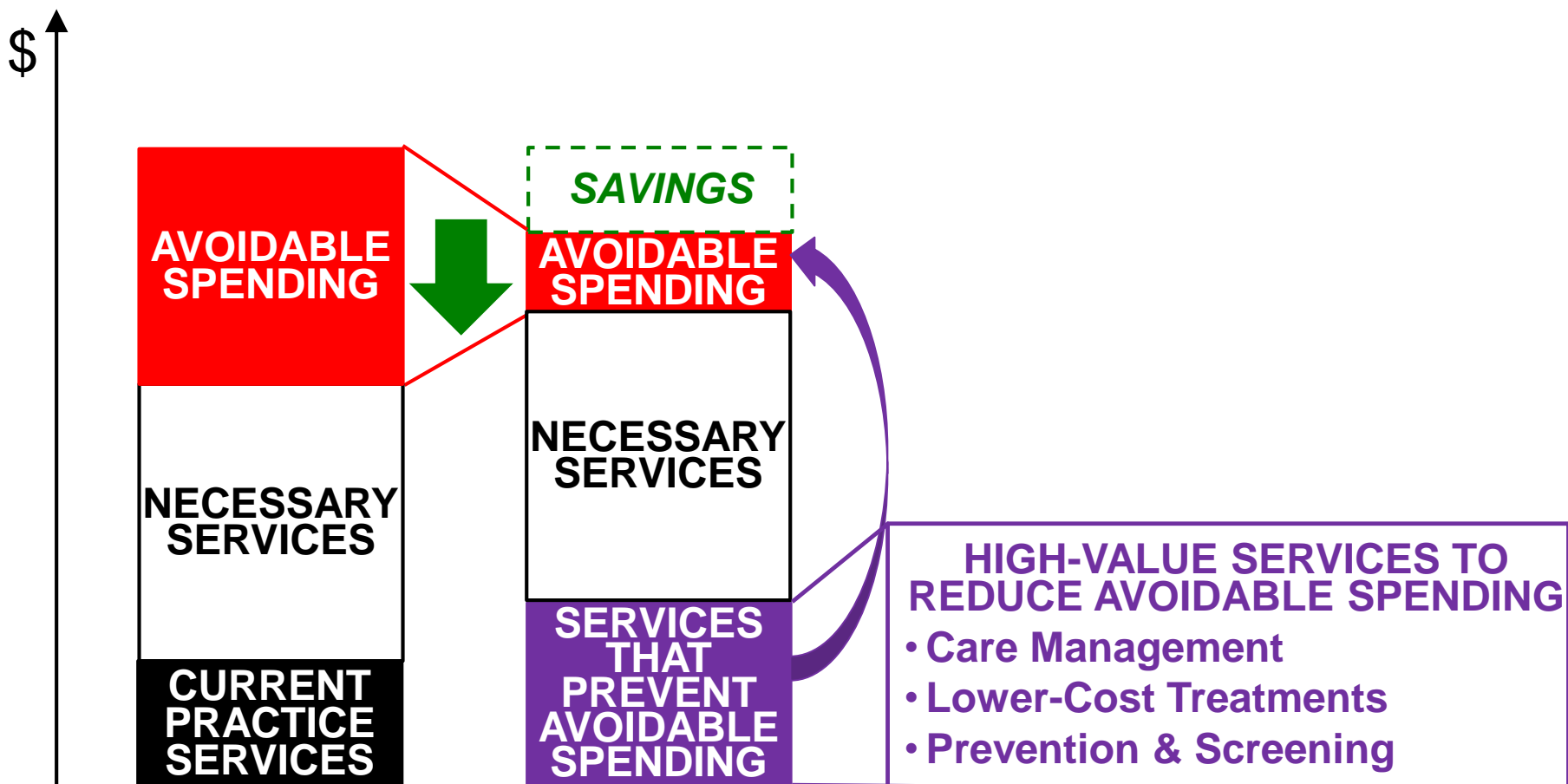
# Starting with Current Spending on a Practice's Patients...



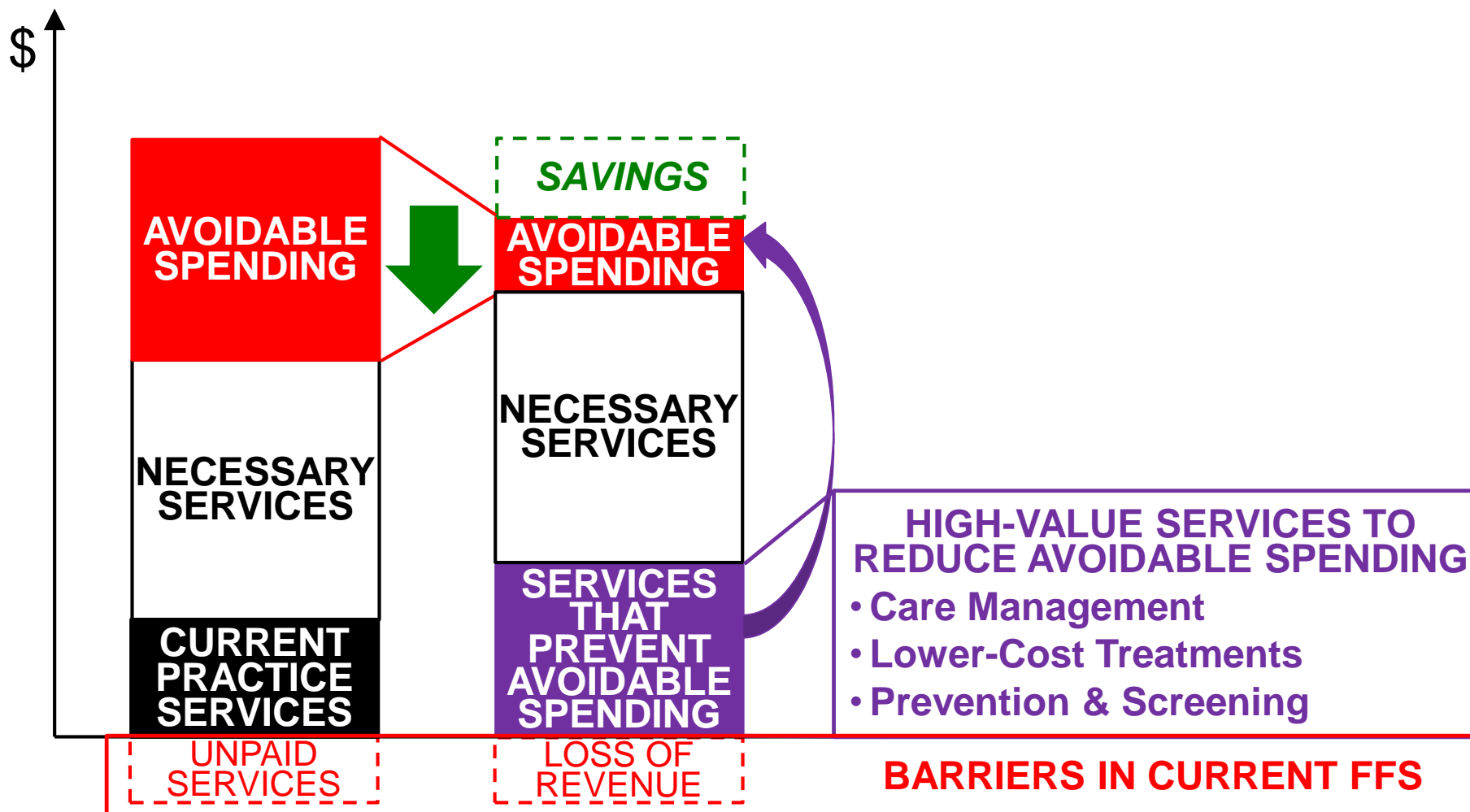
# Step 1: Identify Specific Areas of *Avoidable* Spending



# Step 2a: Design Services That Will Reduce Avoidable Spending

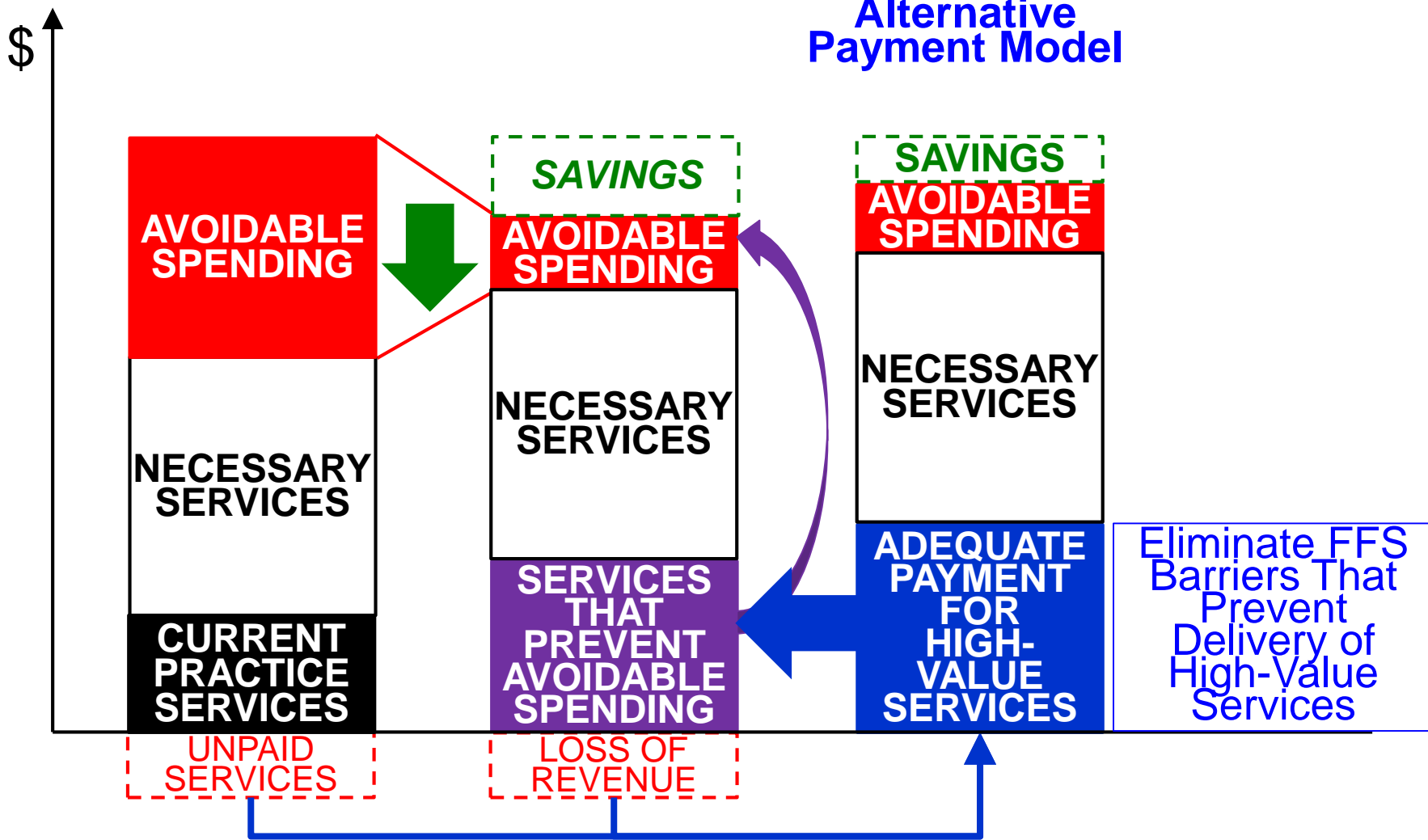


# Step 2b: Identify Barriers in FFS to Delivery of High-Value Services



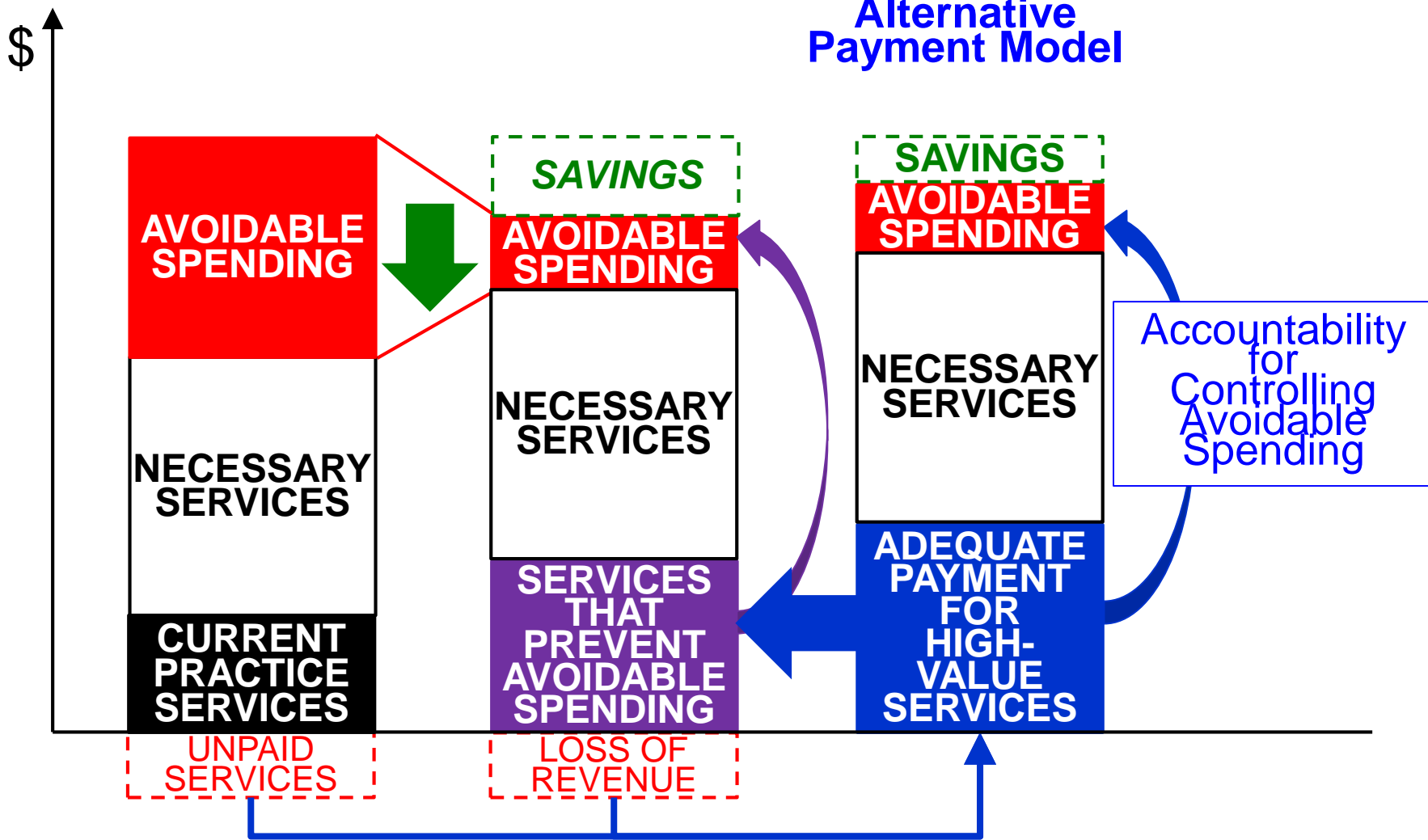
# Step 3: Pay Adequately to Support Higher-Value Services

## Alternative Payment Model



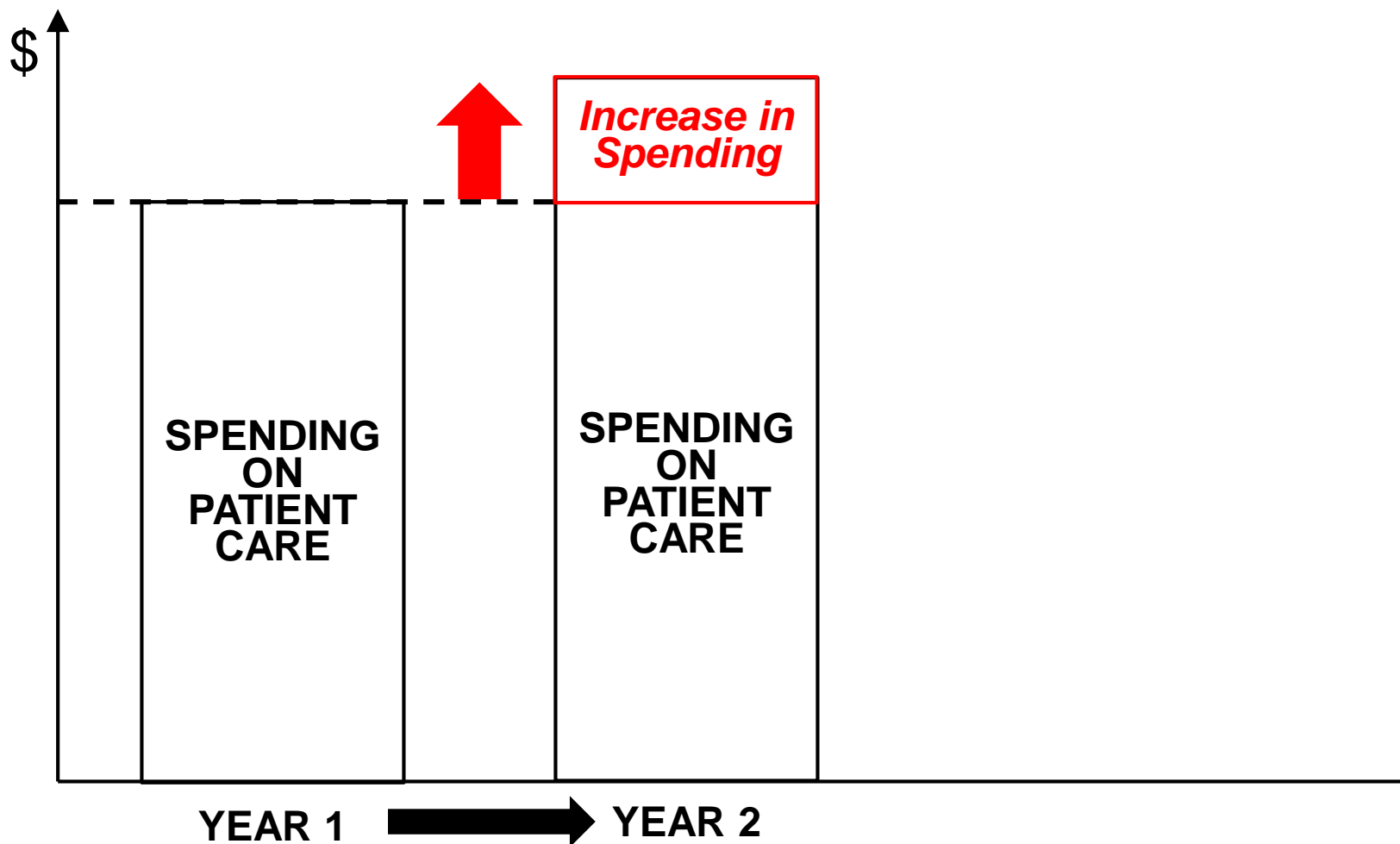
# Step 4: Require Accountability for Cost & Quality *Providers Can Control*

## Alternative Payment Model

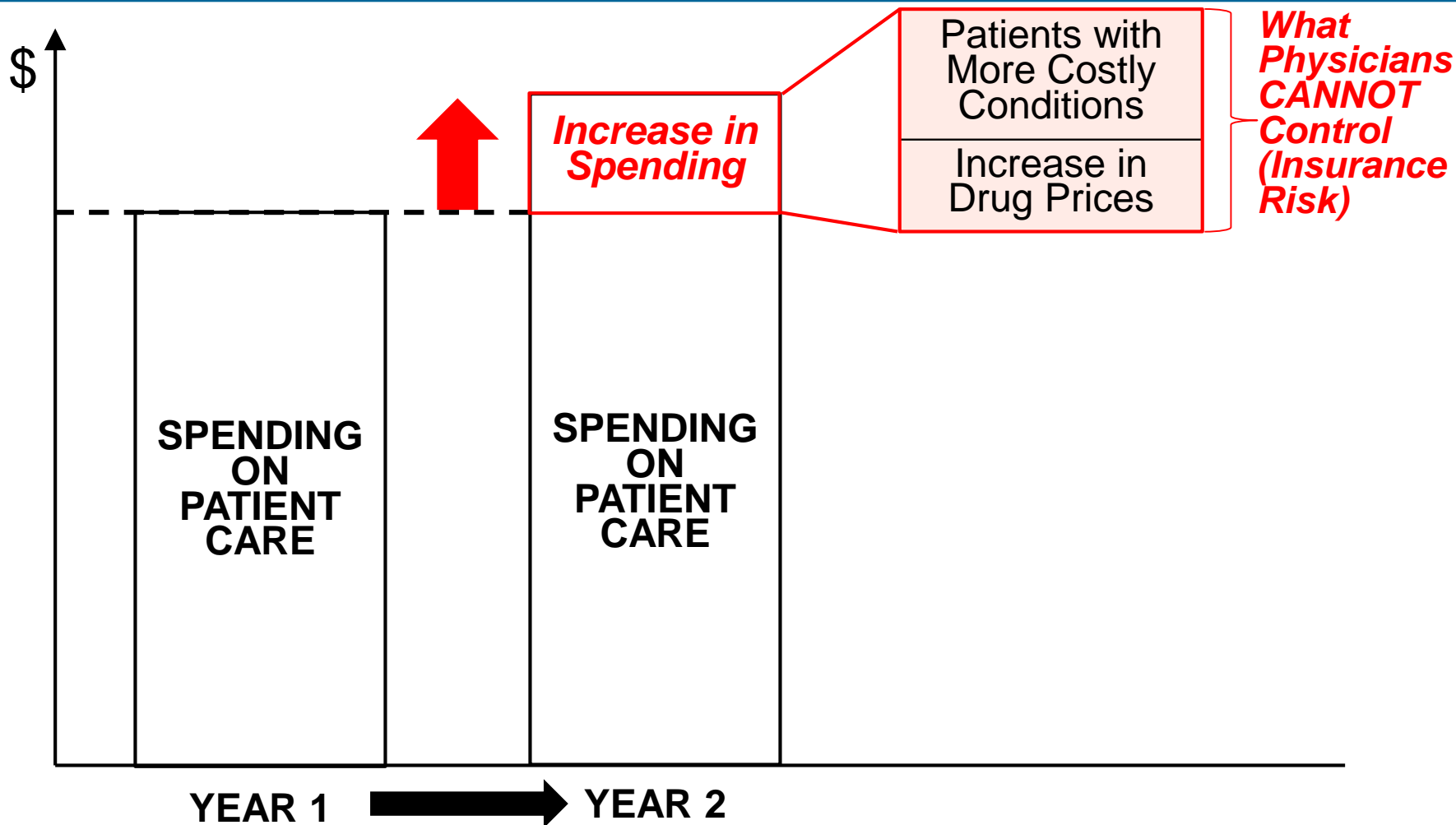




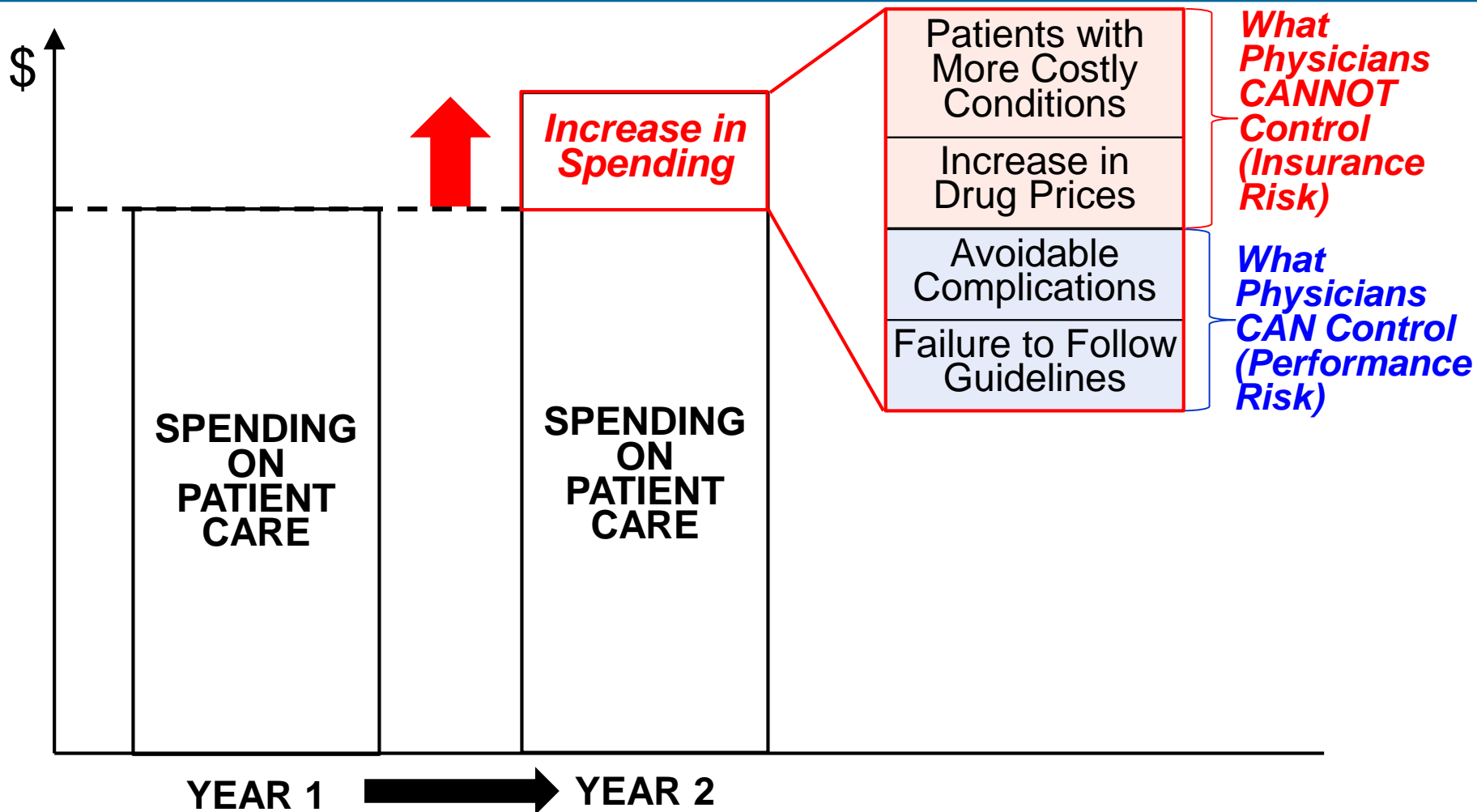
# Accountability $\neq$ Putting Physicians at Risk for Total Spending



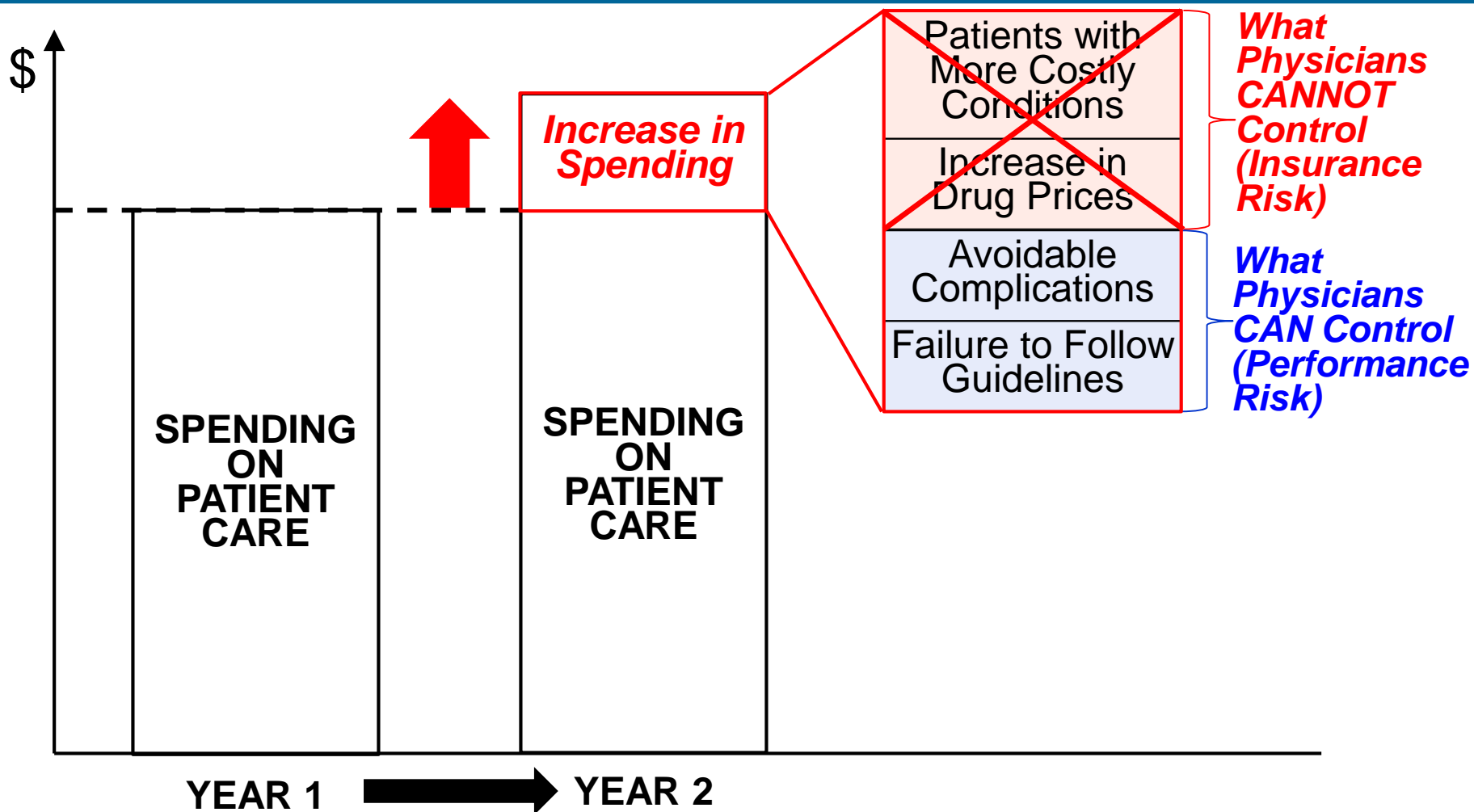
# Physician Practices *Cannot* Control Severity of Disease or Drug Prices



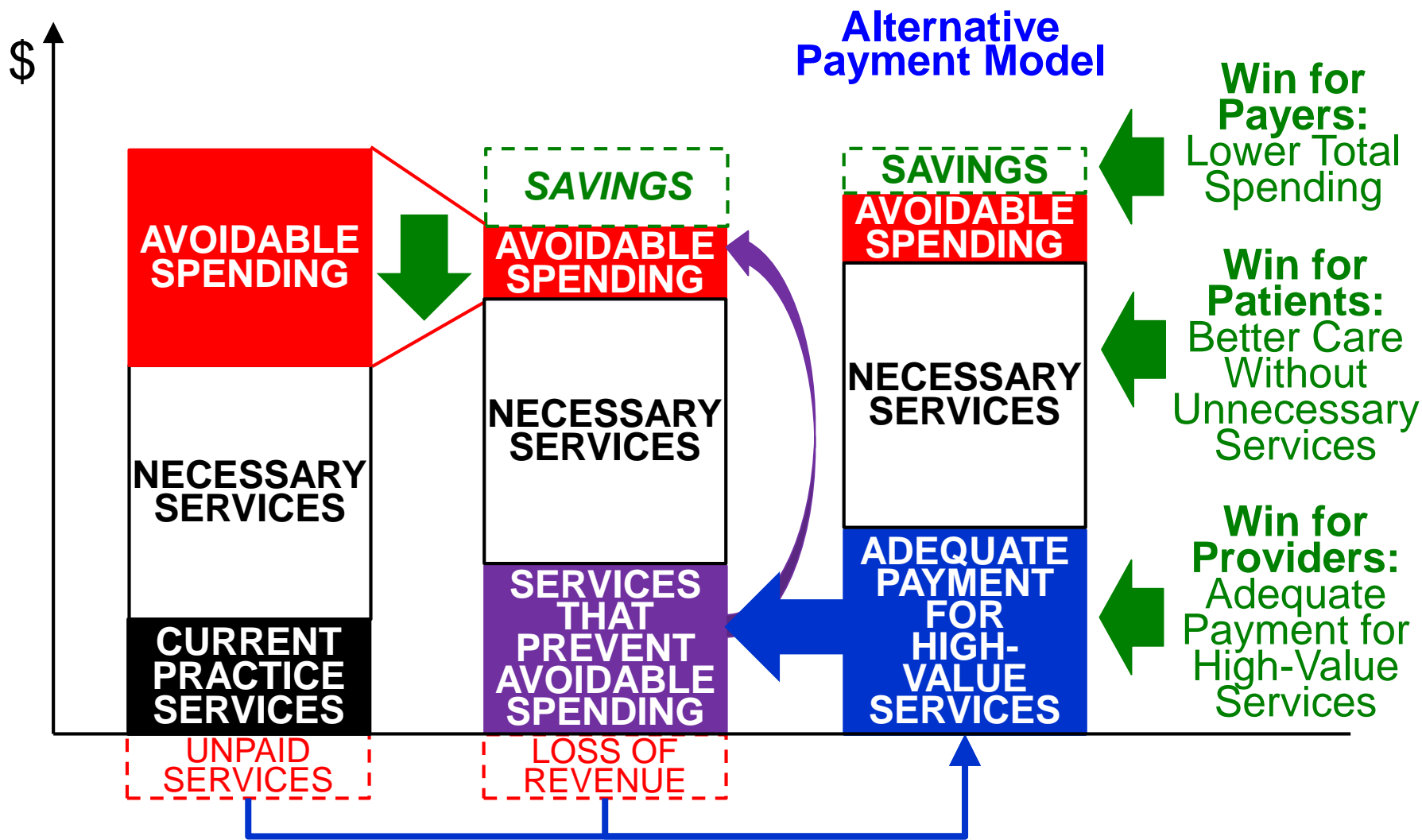
# Physician Practices *Can* Reduce Complications & Avoidable Svcs



# A Good APM Will Limit “Risk” to Things a Physician Can Control

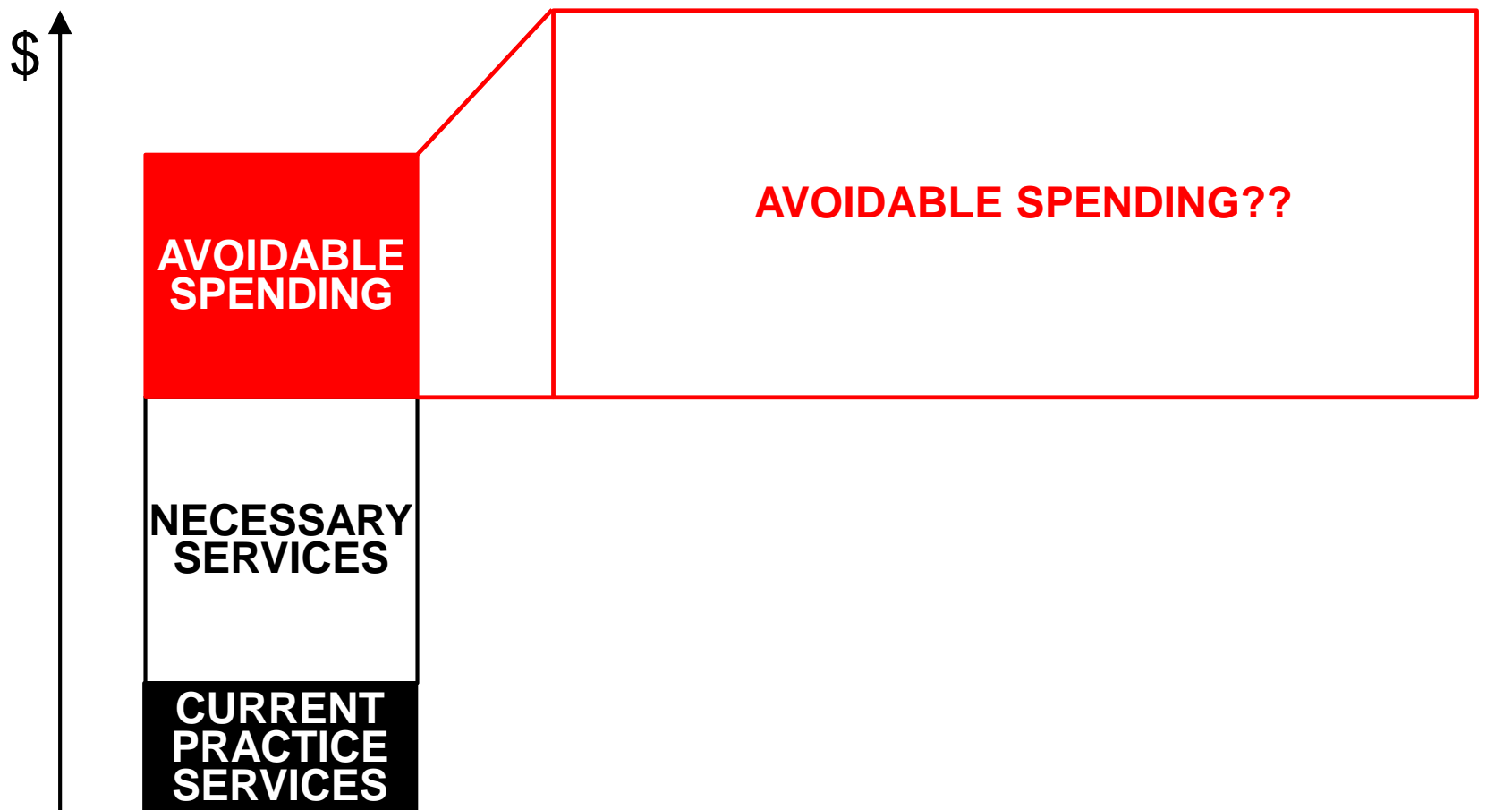


# Good Alternative Payment Models Can Be Win-Win-Wins



How Would This Work  
for Oncology Patients?

# Step 1: Identify Specific Areas of *Avoidable* Spending



# Choosing Wisely Identifies Areas of Avoidable Spending

**Choosing Wisely**  
An initiative of the ABIM Foundation

Society of Gynecologic Oncology  
Five Things Physicians and Patients Should Question

**1** Don't screen low risk women with CA-125 or ultrasound for ovarian cancer. CA-125 and ultrasound in low risk, asymptomatic women have not led to diagnosis of ovarian cancer in earlier stages of disease and cancer mortality. False positive results of either test can lead to unnecessary procedures, which have risks of complication.

**Choosing Wisely**  
An initiative of the ABIM Foundation

American Society for Radiation Oncology  
ASTRO  
Five Things Physicians and Patients Should Question

**1** Don't initiate whole breast radiotherapy as a part of breast cancer therapy in women age ≥50 with early stage invasive breast cancer without considering shorter treatment schedules.

- Whole breast radiotherapy decreases local recurrence and improves survival of women with invasive breast cancer treated with breast therapy. Most studies have utilized "conventionally fractionated" schedules that deliver therapy over 5-6 weeks, often followed by 1-2 boost therapy.
- Recent studies, however, have demonstrated equivalent tumor control and cosmetic outcome in specific patient populations with short of therapy (approximately 4 weeks). Patients and their physicians should review these options to determine the most appropriate course of care.

**2** Don't initiate management of low-risk prostate cancer without discussing active surveillance.

- Patients with prostate cancer have a number of reasonable management options. These include surgery and radiation, as well as close monitoring without therapy in appropriate patients.
- Shared decision-making between the patient and the physician can lead to better alignment of patient goals with treatment and more efficient care.
- ASTRO has published patient-directed written decision aids concerning prostate cancer and numerous other types of cancer. These type instruments can give patients confidence about their choices, improving compliance with therapy.

**3** Don't routinely use extended fractionation schemes (>10 fractions) palliation of bone metastases.

- Studies suggest equivalent pain relief following 30 Gy in 10 fractions, 20 Gy in 5 fractions, or a single 8 Gy fraction.
- A single treatment is more convenient but may be associated with a slightly higher rate of retreatment to the same site.
- Strong consideration should be given to a single 8 Gy fraction for patients with a limited prognosis or with transportation difficulties.

**4** Don't routinely recommend proton beam therapy for prostate cancer outside of a prospective clinical trial or registry.

- There is no clear evidence that proton beam therapy for prostate cancer offers any clinical advantage over other forms of definitive radiation therapy. Clinical trials are necessary to establish a possible advantage of this expensive therapy.

**5** Don't routinely use intensity modulated radiotherapy (IMRT) to deliver whole breast radiotherapy as part of breast conservation therapy.

- Clinical trials have suggested lower rates of skin toxicity after using modern 3-D conformal techniques relative to older methods of 2-D planning.
- In these trials, the term "IMRT" has generally been applied to describe methods that are more accurately defined as field-in-field 3-D conformal radiotherapy.
- While IMRT may be of benefit in select cases where the anatomy is unusual, its routine use has not been demonstrated to provide significant clinical advantage.

American Society of Clinical Oncology  
ASCO  
American Society of Clinical Oncology  
Five Things Physicians and Patients Should Question  
An initiative of the ABIM Foundation

The American Society of Clinical Oncology (ASCO) is a medical professional oncology society committed to conquering cancer through research, education, prevention, and delivery of high-quality patient care. ASCO recognizes the importance of evidence-based cancer care and making wise choices in the diagnosis and management of patients with cancer. After careful consideration by experienced oncologists, ASCO highlights five categories of tests, procedures and/or treatments whose common use and clinical value are not supported by available evidence. These tests and treatment options should not be administered unless the physician and patient have carefully considered if their use is appropriate in the individual case. As an example, when a patient is enrolled in a clinical trial, these tests, treatments, and procedures may be part of the trial protocol and therefore deemed necessary for the patient's participation in the trial.

**1** Don't use cancer-directed therapy for solid tumor patients with the following characteristics: low performance status (3 or 4), no benefit from prior evidence-based interventions, not eligible for a clinical trial, and no strong evidence supporting the clinical value of further anti-cancer treatment.

- Studies show that cancer directed treatments are likely to be ineffective for solid tumor patients who meet the above stated criteria.
- Exceptions include patients with functional limitations due to other conditions resulting in a low performance status or those with disease characteristics (e.g., mutations) that suggest a high likelihood of response to therapy.
- Implementation of this approach should be accompanied with appropriate palliative and supportive care.

**2** Don't perform PET, CT, and radionuclide bone scans in the staging of early prostate cancer at low risk for metastasis.

- Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
- Evidence does not support the use of these scans for staging of newly diagnosed low grade carcinoma of the prostate (Stage T1c/T2a, prostate-specific antigen (PSA) <10 ng/ml, Gleason score less than or equal to 6) with low risk of distant metastasis.
- Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.

**3** Don't perform PET, CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis.

- Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
- In breast cancer, for example, there is a lack of evidence demonstrating a benefit for the use of PET, CT, or radionuclide bone scans in asymptomatic individuals with newly identified ductal carcinoma in situ (DCIS), or clinical stage I or II disease.
- Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.

**4** Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.

- Surveillance testing with serum tumor markers or imaging has been shown to have clinical value for certain cancers (e.g., colorectal). However for breast cancer that has been treated with curative intent, several studies have shown there is no benefit from routine imaging or serial measurement of serum tumor markers in asymptomatic patients.
- False-positive tests can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.

**5** Don't use white cell stimulating factors for primary prevention of febrile neutropenia for patients with less than 20 percent risk for this complication.

- ASCO guidelines recommend using white cell stimulating factors when the risk of febrile neutropenia, secondary to a recommended chemotherapy regimen, is approximately 20 percent and equally effective treatment programs that do not require white cell stimulating factors are unavailable.
- Exceptions should be made when using regimens that have a lower chance of causing febrile neutropenia if it is determined that the patient is at high risk for this complication (due to age, medical history, or disease characteristics).

**Choosing Wisely**  
An initiative of the ABIM Foundation

American Academy of Hospice and Palliative Medicine  
AAHPM  
Five Things Physicians and Patients Should Question

**1** Don't recommend percutaneous feeding tubes in patients with advanced dementia.

**Choosing Wisely**  
An initiative of the ABIM Foundation

Commission on Cancer  
Five Things Physicians and Patients Should Question

**1** Don't perform surgery to remove a breast lump for suspicious findings unless needle biopsy cannot be done.

- Needle biopsy is large bore core biopsy or vacuum-assisted large bore needle for histology or fine needle aspiration for cytology.
- Needle biopsy may be directed by breast imaging (ultrasound, mammographic, magnetic resonance imaging) or by direct palpation.
- Studies show that confirmation of breast cancer diagnosis prior to any surgery allows for complete multidisciplinary treatment counseling, reduces the overall number of surgical procedures needed for treatment, improves the cosmetic results of surgery and avoids mastectomy resulting from multiple surgical procedures.
- Use of needle biopsy also makes surgery altogether unnecessary for the majority of image-detected breast lesions that require biopsy but prove to be benign.
- Needle biopsy is generally less costly than open surgical biopsy.
- Some breast lesions require surgical biopsy because of a location in the breast that precludes image localization. This may apply to 10-15% of breast lesions. Surgeons performing surgical breast biopsy without preceding needle biopsy should document the reason for no needle biopsy.

**2** Don't initiate surveillance testing after cancer treatment without providing the patient a survivorship care plan.

- Inappropriate or overused testing after cancer treatment is common, but provides no value in surveillance for recurrence and often leads to other unnecessary tests, potential morbidity, anxiety, uncertainty and higher cost.
- A survivorship care plan provides the patient and their primary providers an evidence-based road map for surveillance testing and supportive care.
- The Institute of Medicine identified the need for a survivorship care plan as a key factor to help cancer patients transition to long-term surveillance care, avoid unnecessary services and seek appropriate rehabilitative care and emotional support.
- A survivorship care plan includes a summary of the type and stage of the cancer, treatment received, the plan for type and frequency of surveillance testing and information on resources for rehabilitative and supportive care.
- Templates for survivorship care plans are available from organizations including the Livestrong Foundation, the National Coalition for Cancer Survivorship and the American Society of Clinical Oncology.
- Livestrong Care Plan: [www.livestrongcancerplan.org](http://www.livestrongcancerplan.org)
- JourneyForward: [www.journeyforward.org](http://www.journeyforward.org)
- American Society of Clinical Oncology: [www.cancer.net/survivorship/ascso-cancer-treatment-survival](http://www.cancer.net/survivorship/ascso-cancer-treatment-survival)



# 22%-47% Non-Adherence to Choosing Wisely Criteria

## Focus on Quality

### Original Contribution

#### Baseline Estimates of Adherence to American Society of Clinical Oncology/American Board of Internal Medicine Choosing Wisely Initiative Among Patients With Cancer Enrolled With a Large Regional Commercial Health Insurer

By Scott D. Ramsey, MD, PhD, Catherine Fedorenko, MMSci, Rakesh Chauhan, MD, Richard McGee, MD, Gary H. Lyman, MD, MPH, Karma Kreizenbeck, BA, and Aastha Bansal, PhD

Fred Hutchinson Cancer Research Center, University of Washington; and Premera Blue Cross, Seattle, WA  
See accompanying article on page 344

#### Abstract

**Purpose:** The American Society of Clinical Oncology (ASCO)/American Board of Internal Medicine (ABIM) Choosing Wisely (CW) measures aim to reduce the use of interventions that lack evidence of benefit in cancer care. The study presented here characterized adherence to the 2012 ASCO/ABIM CW recommendations by linking health plan claims data with a regional cancer registry and sought to identify areas for research interventions to improve adherence.

**Methods:** SEER records for patients diagnosed with cancer in Western Washington State between 2007 and 2014 were linked with enrollment and claims from a large regional commercial insurance plan. Using claims and SEER records, algorithms were developed to characterize adherence to each CW measure. In addition, we calculated differences in total reimbursements and procedure-specific reimburse-

ments for patients receiving adherent and nonadherent care.

**Results:** A total of 22,350 unique individuals with cancer were linked with insurance enrollment records and met basic eligibility criteria. Overall adherence varied from 53% (breast surveillance) to 76% (breast staging). Within each measure, adherence varied substantially by stage at diagnosis and by cancer site in situations in which the CW measure affected multiple types of cancer. The difference in reimbursements between adherent and nonadherent populations across all five measures was approximately \$29 million.

**Conclusion:** Adherence to the ASCO/ABIM CW measures varies widely, as does the cost implication of nonadherence. A structured approach to evaluating adherence and cost impact is needed before developing programs aimed at improving adherence to the ASCO/ABIM CW measures.

#### Introduction

In April of 2012, the American Society of Clinical Oncology (ASCO) and the American Board of Internal Medicine (ABIM) Foundation, as part of the ABIM Choosing Wisely (CW) campaign, released the initial Top Five list of tests and procedures in oncology for which use should be questioned because of their failure to add clinical value (Data Supplement).<sup>1</sup>

The CW list was designed to identify practices that are costly, widely used, and for which no evidence exists to support value, and to promote conversations between physicians and patients about using the most appropriate tests and treatments as well as about avoiding care that is unnecessary or for which harm may outweigh the benefits.

Although the CW list was selected after input from more than 200 oncologists, there was no empiric validation of either the prevalence of the care processes that were included, their costs to the health care system, or the accuracy of measurement of these processes in oncology practice. Because these are important issues for health care delivery systems, we used cancer registry and health insurance claims data to test the importance of the practices that were included on the CW list, to retrospectively review oncologists' adherence to these practices, and to

test the feasibility of using administrative data to measure adherence. These are issues of relevance to health care delivery systems and health insurers, given that implementation of the CW recommendations will require substantial investments on many levels.

Accordingly, the primary purpose of this study was to estimate adherence to the ASCO/ABIM recommendations in persons with cancer who are enrolled in a large regional commercial insurance plan. To further evaluate the relative level of cost savings that might be achieved through improving adherence to the measures, we also estimated total health care costs for persons whose care was adherent to CW recommendations versus costs for those with similar characteristics who had nonadherent care. Our findings may be helpful to health care organizations that are considering investment in measures and processes that are designed to improve adherence to the CW recommendations for oncology.

#### Methods

##### Setting and Study Population

The study was conducted by Fred Hutchinson Cancer Research Center investigators in conjunction with leaders at Premera

## Rate of Non-Adherence to Choosing Wisely Guidelines

Do not use routine biomarker tests and advanced imaging to screen for recurrence in asymptomatic breast cancer patients...

Avoid anticancer therapy in patients with advanced solid tumors who are unlikely to benefit

Do not use white-cell stimulating factors for patients undergoing chemotherapy with less than 20% risk of febrile...

Do not use PET, CT and radionuclide bone scans in staging early prostate cancer at low risk of spreading

Do not use PET, CT and radionuclide bone scans in staging early breast cancer at low risk of spreading



# 27%-40% Non-Adherence to Choosing Wisely Criteria

Original Contribution | CARE DELIVERY

## Choosing Wisely: Opportunities for Improving Value in Cancer Care Delivery?

Gabrielle B. Rocque, MD, Courtney P. Williams, MPH, Bradford E. Jackson, PhD, Audrey S. Wallace, MD, MSN, Karina I. Halliava, MD, Kelly M. Kenzik, PhD, Edward E. Partridge, MD, and Maria Pisu, PhD

University of Alabama at Birmingham, Birmingham, AL

### Abstract

#### Introduction

Patients, providers, and payers are striving to identify where value in cancer care can be increased. As part of the Choosing Wisely (CW) campaign, ASCO and the American Society for Therapeutic Radiology and Oncology have recommended against specific, yet commonly performed, treatments and procedures.

#### Methods

We conducted a retrospective analysis of Medicare claims data to examine concordance with CW recommendations across 12 cancer centers in the southeastern United States. Variability for each measure was evaluated on the basis of patient characteristics and site of care. Hierarchical linear modeling was used to examine differences in average costs per patient by concordance status. Potential cost savings were estimated on the basis of a potential 95% adherence rate and average cost difference.

#### Results

The analysis included 37,686 patients with cancer with Fee-for-Service Medicare insurance. Concordance varied by CW recommendation from 39% to 94%. Patient characteristics were similar for patients receiving concordant and nonconcordant care. Significant variability was noted across centers for all recommendations, with as much as an 89% difference. Nonconcordance was associated with higher costs for every measure. If concordance were to increase to 95% for all measures, we would estimate a \$19 million difference in total cost of care per quarter.

#### Conclusion

These results demonstrate ample room for reduction of low-value care and corresponding costs associated with the CW recommendations. Because variability in concordance was driven primarily by site of care, rather than by patient factors, continued education about these low-value services is needed to improve the value of cancer care.

### INTRODUCTION

Because health care costs are rising at an unsustainable rate,<sup>1</sup> patients, providers, and payers are collectively striving to identify where value in cancer care can be increased and how the triple aim of better health,

better health care, and lower cost can be achieved.<sup>2</sup> The American Board of Internal Medicine's Choosing Wisely (CW) campaign aims to improve value by targeting low-value services in medicine and thus increase quality of care while lowering cost.<sup>3</sup>

### ASSOCIATED CONTENT

Appendix DQR 10.1200/JOP.2016.015396

DOI: 10.1200/JOP.2016.015396 published online ahead of print at [ascopubs.org/journal/jop](http://ascopubs.org/journal/jop) on November 15, 2016.

## Rate of Non-Adherence to Choosing Wisely Guidelines

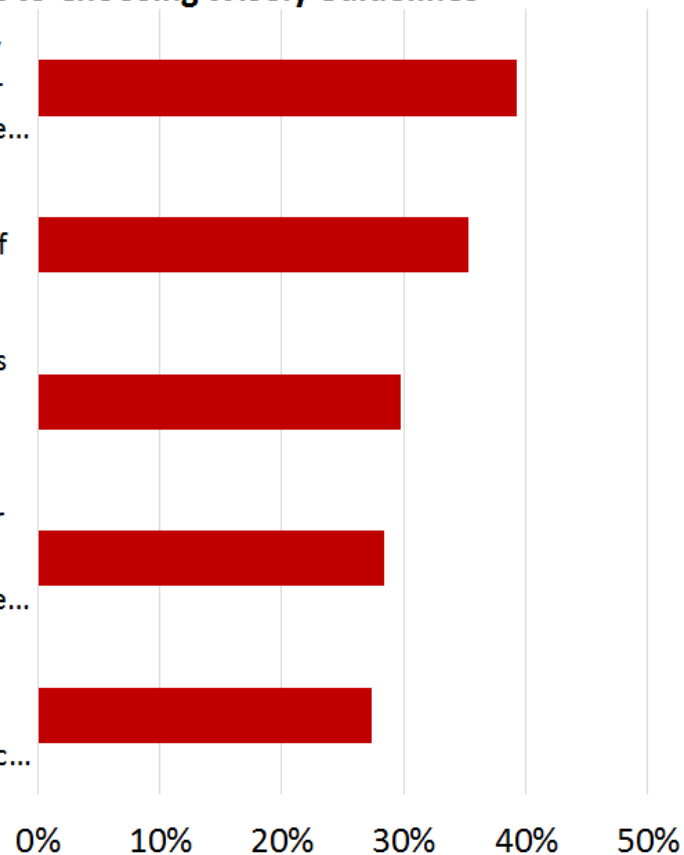
Do not use combination chemotherapy when treating metastatic breast cancer unless the patient needs rapid response...

Do not routinely use extended fractionation schemes for palliation of bone metastases

Do not use white-cell stimulating factors for patients undergoing chemotherapy with less than 20% risk of febrile...

Do not perform surveillance testing or imaging for asymptomatic individuals treated for breast cancer with curative...

Do not give patients starting a chemotherapy regimen with low or moderate risk of nausea an antiemetic...



# Example: 30% of Patients Receive CSFs Outside of Guidelines

**Focus on Quality**  
Original Contribution

**Baseline Estimates of Adherence to American Society of Clinical Oncology/American Board of Internal Medicine Choosing Wisely Initiative Among Patients With Cancer Enrolled With a Large Regional Commercial Health Insurer**

*By Scott D. Ramsey, MD, PhD, Catherine Fedorovich, MMS, Rahul Chatur, MD, Richard McGee, MD, Gary H. Lyman, MD, MPH, Karina Krotzschok, BA, and Anusha Bansal, PhD*  
Fred Hutchinson Cancer Research Center, University of Washington, and Princess Max Grace, Seattle, WA  
See accompanying article on page 545

**Abstract**  
Purpose: The American Society of Clinical Oncology (ASCO) American Board of Internal Medicine (ABIM) Choosing Wisely (CW) initiative can reduce the cost of treatments for low evidence of benefit cancer care. The study presented here characterized adherence to the ASCO/ABIM CW recommendations by health care teams with a regional commercial health insurer and sought to identify areas for research and practice improvement.  
Methods: ICD9 records for patients diagnosed with cancer in western Washington State between 2010 and 2012 were linked with enrollment and claims from a large regional commercial insurance plan. Thirty claims and ICD9 records algorithms were developed to characterize adherence to each CW measure. In addition, we calculated adherence to total recommendations and procedure-specific reimbursements for patients receiving adherent and nonadherent care.  
Results: A total of 22,260 unique individuals with cancer were linked with insurance enrollment records and met basic eligibility criteria. Overall adherence to the CW recommendations was 60%. Overall adherence was lower for 10% (three measures) for patients with breast cancer, 10% (three measures) for patients with colorectal cancer, and 10% (three measures) for patients with lung cancer. The difference in reimbursements between adherent and nonadherent populations for each measure was approximately \$100,000.  
Conclusion: Adherence to the ASCO/ABIM CW initiative varies widely, as does the cost reduction of adherence. A structured approach to evaluating adherence and cost impact is needed before developing programs aimed at improving adherence to the ASCO/ABIM CW measure.

**Introduction**  
In April of 2012, the American Society of Clinical Oncology (ASCO) and the American Board of Internal Medicine (ABIM) Foundation, as part of the ABIM Choosing Wisely (CW) campaign, released the initial Top 10 list of tests and procedures to undergo that which one should question because of their failure to add clinical value (this Supplement).  
The CW list was designed to identify practices that are costly, widely used, and for which no evidence exists to support value, and to promote conversations between patients and patients' agents using the most appropriate tests and treatments as well as those avoiding care that is unnecessary for which harms may outweigh the benefits.  
Although the CW list was selected after input from more than 200 specialists, there was no explicit validation of either the prevalence of the care practices that were included, their use in the health care system, or the accuracy of measurement of these practices in oncology practice. Because there are no patient claims for health care delivery systems, we used cancer registry and health insurance claims data to test the representativeness of the practices that were included in the CW list, to independently assess each patient's adherence to these practices, and to

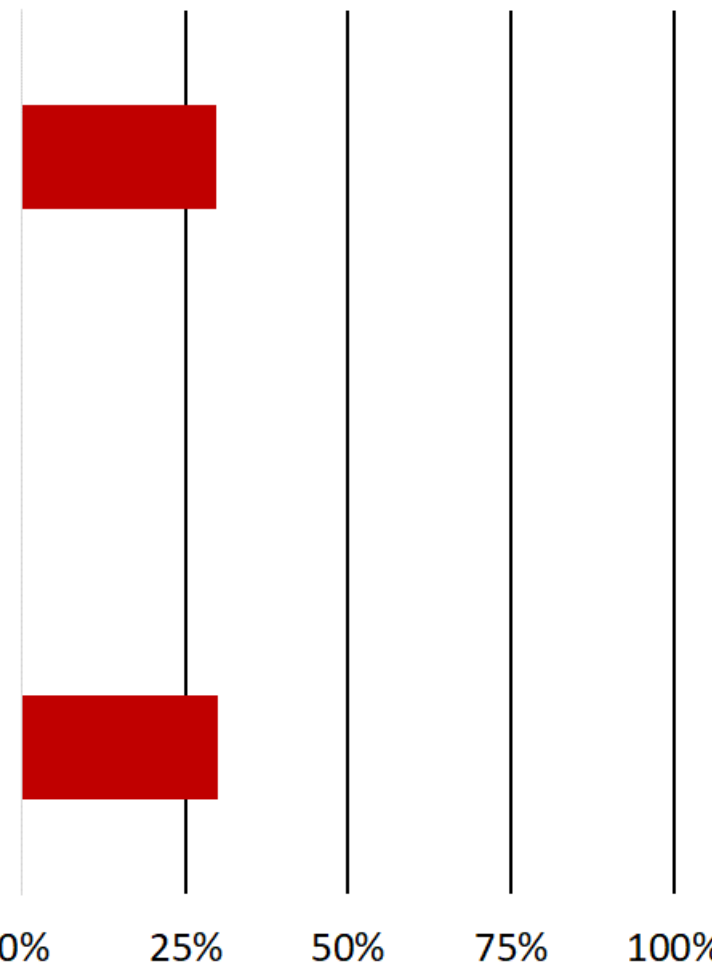
test the feasibility of using administrative data to measure adherence. These are issues of relevance to health care delivery systems and health insurers, given that implementation of the CW recommendations will require substantial investments on many levels.  
Accordingly, the primary purpose of this study was to estimate adherence to the ASCO/ABIM recommendations in patients with cancer who are enrolled in a large regional commercial insurance plan. To further evaluate the health care cost savings that might be achieved through improving adherence to the measures, we also estimated total health care costs for patients whose care was adherent to CW recommendations versus costs for those with similar characteristics who had nonadherent care. Our findings may be helpful to health care organizations that are considering investment in measures and processes that are designed to improve adherence to the CW recommendations for delivery practice.

**Methods**  
**Setting and Study Population**  
The study was conducted by Fred Hutchinson Cancer Research Center investigators in conjunction with leaders at Princess

**Journal of Oncology Practice** • Vol. 11, Issue 4

## Rate of Non-Adherence to Choosing Wisely Guidelines

Do not use white-cell stimulating factors for patients undergoing chemotherapy with less than 20% risk of febrile neutropenia



**Original Contribution** | [View Article](#)

**Choosing Wisely: Opportunities for Improving Value in Cancer Care Delivery?**

*Gabriel B. Riquie, MD, Courtney P. Williams, MPH, Bradford E. Jackson, PhD, Audrey S. Walker, MD, MPH, Kristin J. Havelka, MD, Arly M. Karak, PhD, Edward F. Partridge, MD, and Martin P. Fox*

*University of Alabama at Birmingham, Birmingham, AL*

**Abstract**  
**Introduction**  
Patients, providers, and payers are striving to identify whom value cancer care can be increased. As part of the Choosing Wisely (CW) Campaign, ASCO and the American Society for Healthcare Quality and Delivery have recommended against specific, yet commonly performed, treatments and procedures.  
**Methods**  
We conducted a retrospective analysis of Medicare claims data to examine concordance with CW recommendations across 12 cancer centers in the southeastern United States. Eligibility for each measure was established on the basis of patient characteristics and use of care. Medicare administrative records were used to compare adherence to each measure. If concordance was not achieved for 10% of measures, we would estimate a \$10-million difference in total cost of care per quarter.  
**Conclusion**  
These results demonstrate significant room for reduction of low-value care and corresponding costs associated with the CW recommendations. Because variability in concordance was often greatest for use of care rather than by patient factors, contextual education about these low-value services is needed to improve the value of cancer care.  
**Introduction**  
Because health care costs are rising at an unsustainable rate, patients, providers, and payers are collectively striving to identify when value in cancer care can be increased and how the triple aim of better health, better health care, and lower cost can be achieved. The American Board of Internal Medicine's Choosing Wisely (CW) Campaign aims to improve value by targeting low-value services in medicine and thus increase quality of care while lowering cost.  
Because health care costs are rising at an unsustainable rate, patients, providers, and payers are collectively striving to identify when value in cancer care can be increased and how the triple aim of better health,

**ASSOCIATED CONTENT**  
Supplemental digital content is available for this article. Direct URL citations appear in the text and any supplemental material is available for this article.  
DOI: 10.1200/JOP.2015.000000  
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Do not use white-cell stimulating factors for patients undergoing chemotherapy with less than 20% risk of febrile neutropenia

# Other Studies Have Found Even Higher Rates of Inappropriate Use

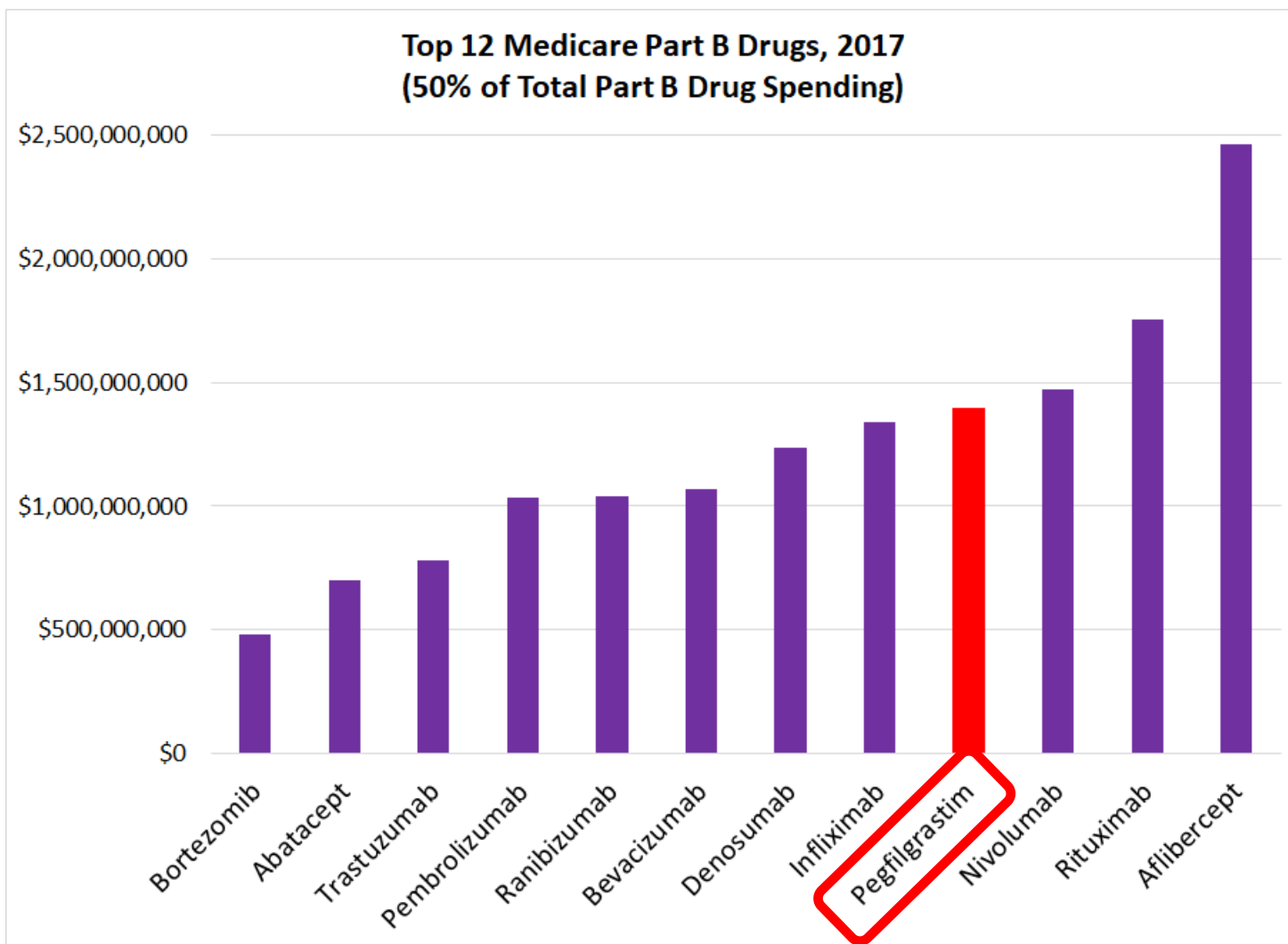
- A study of the use of Neulasta (pegfilgrastim) at an outpatient oncology clinic found that **approximately half of all cases using pegfilgrastim for primary prophylaxis were not consistent with published guidelines**, representing an avoidable cost of \$8,093 per patient.

(Waters GE et al. Comparison of Pegfilgrastim Prescribing Practice to National Guidelines at a University Hospital Outpatient Oncology Clinic. *Journal of Oncology Practice* 9(4):203. July 2013.)

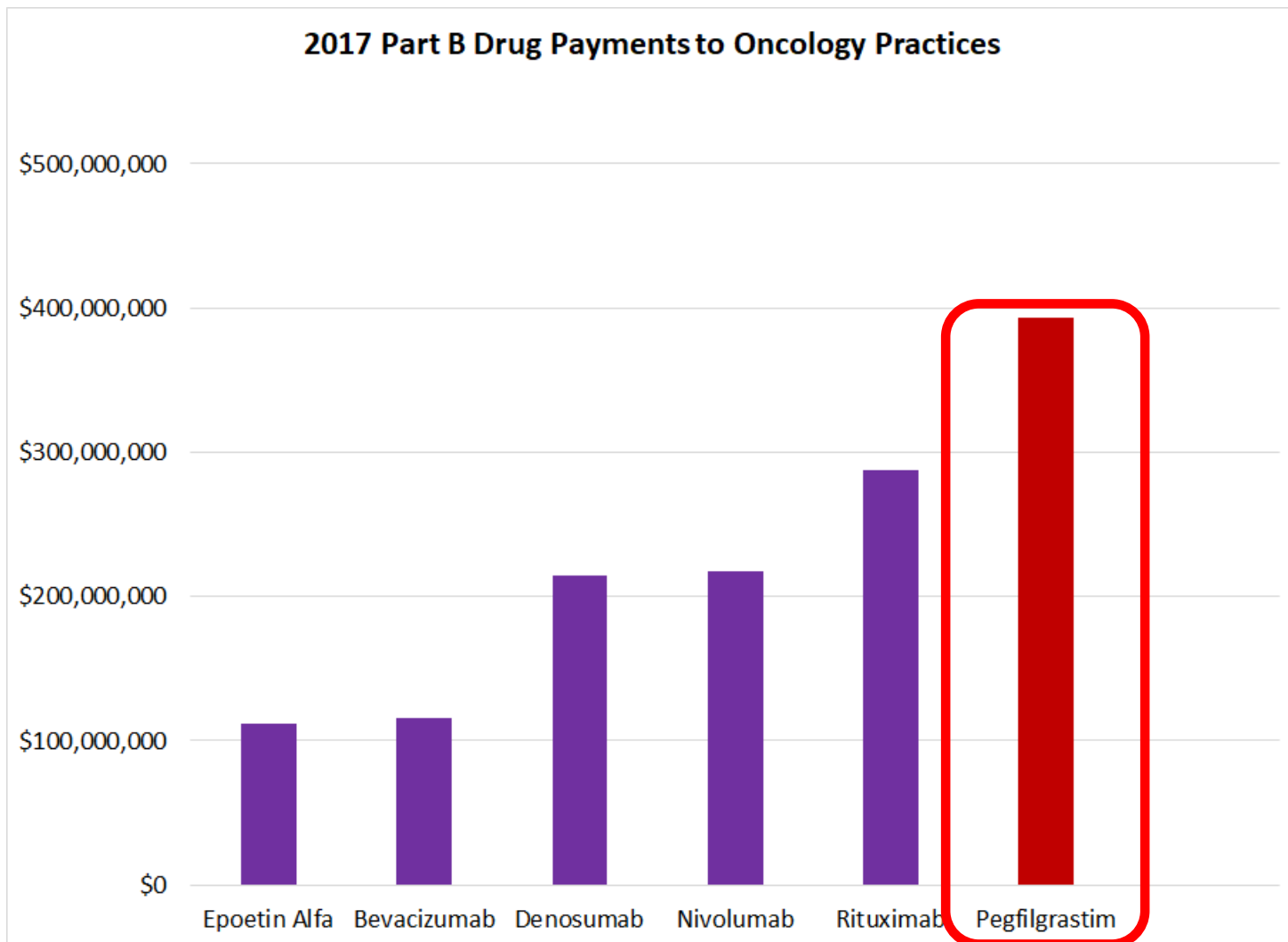
- A study of the use of myeloid colony-stimulating factors (CSF) such as pegfilgrastim in lung and cancer patients found that **96% of CSFs were administered in scenarios where CSF therapy is not recommended** by evidence-based guidelines.

(Potosky AL et al. Use of Colony-Stimulating Factors With Chemotherapy: Opportunities for Cost Savings and Improved Outcomes. *Journal of the National Cancer Institute* 103:979-982. June 22, 2011.)

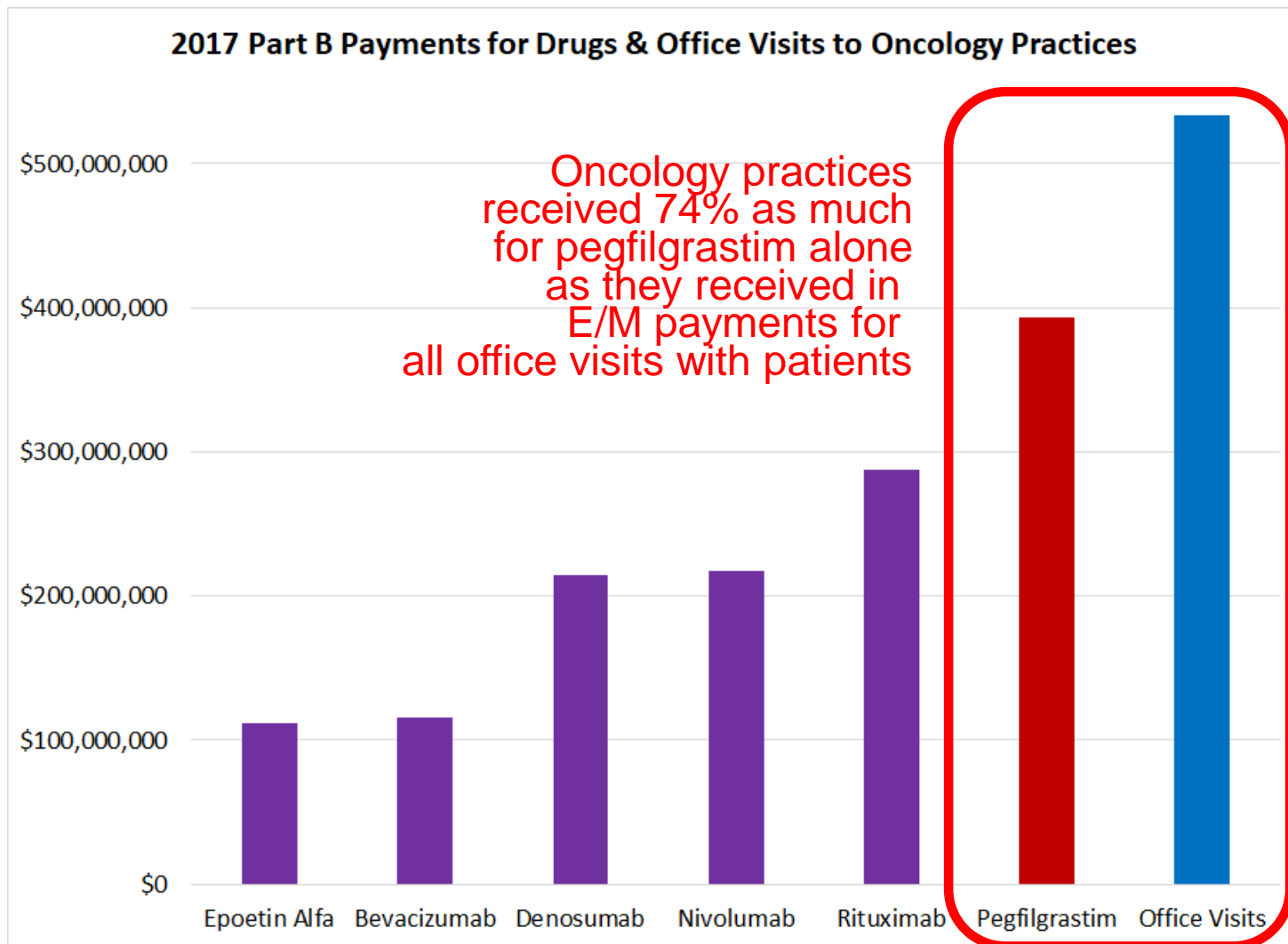
# Pegfilgrastim is the #4 Part B Drug for Medicare



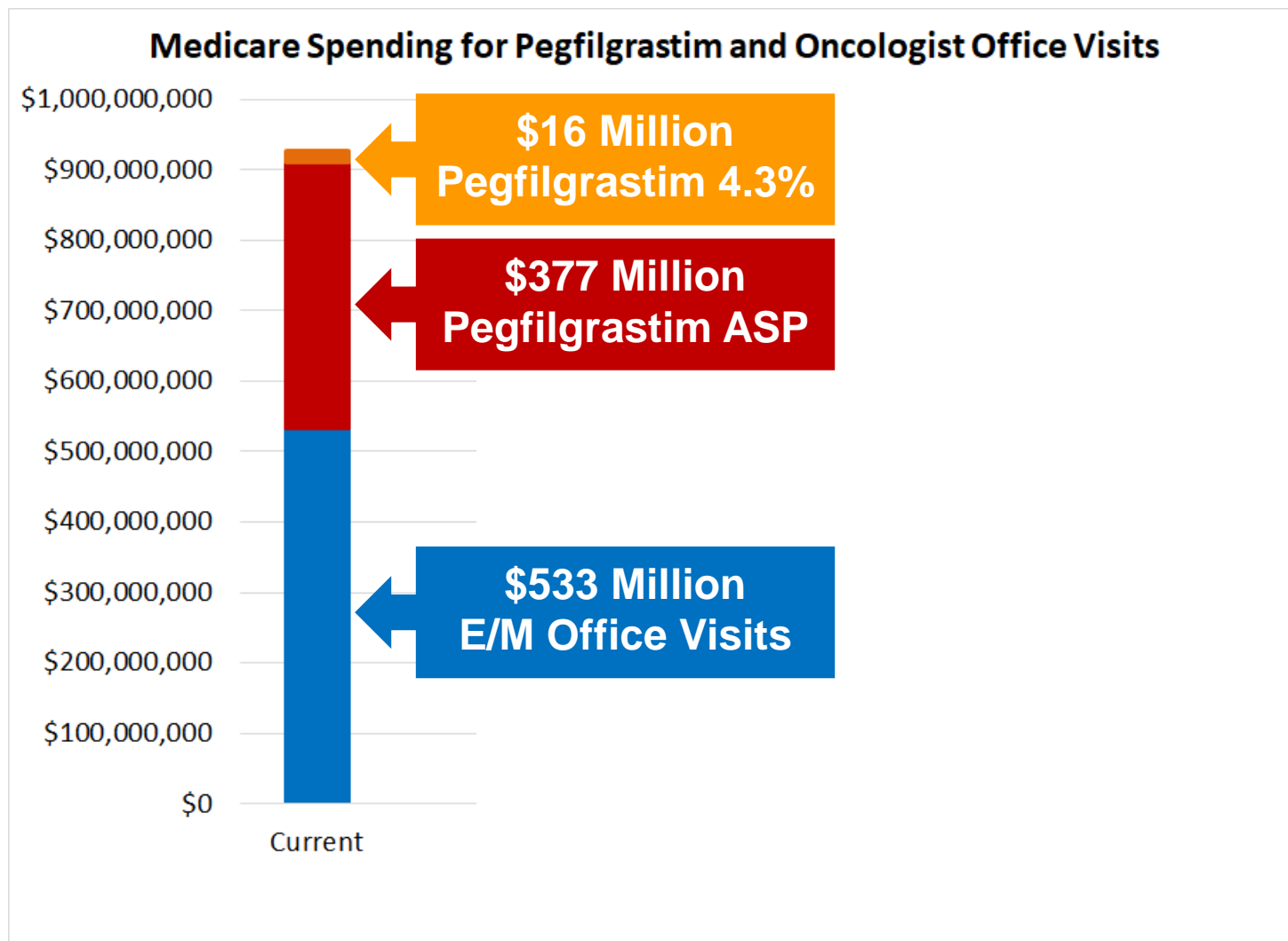
# Pegfilgrastim is the #1 Part B Drug for Oncology Practices



# Payments for Pegfilgrastim Are Almost As Much As Office Visits



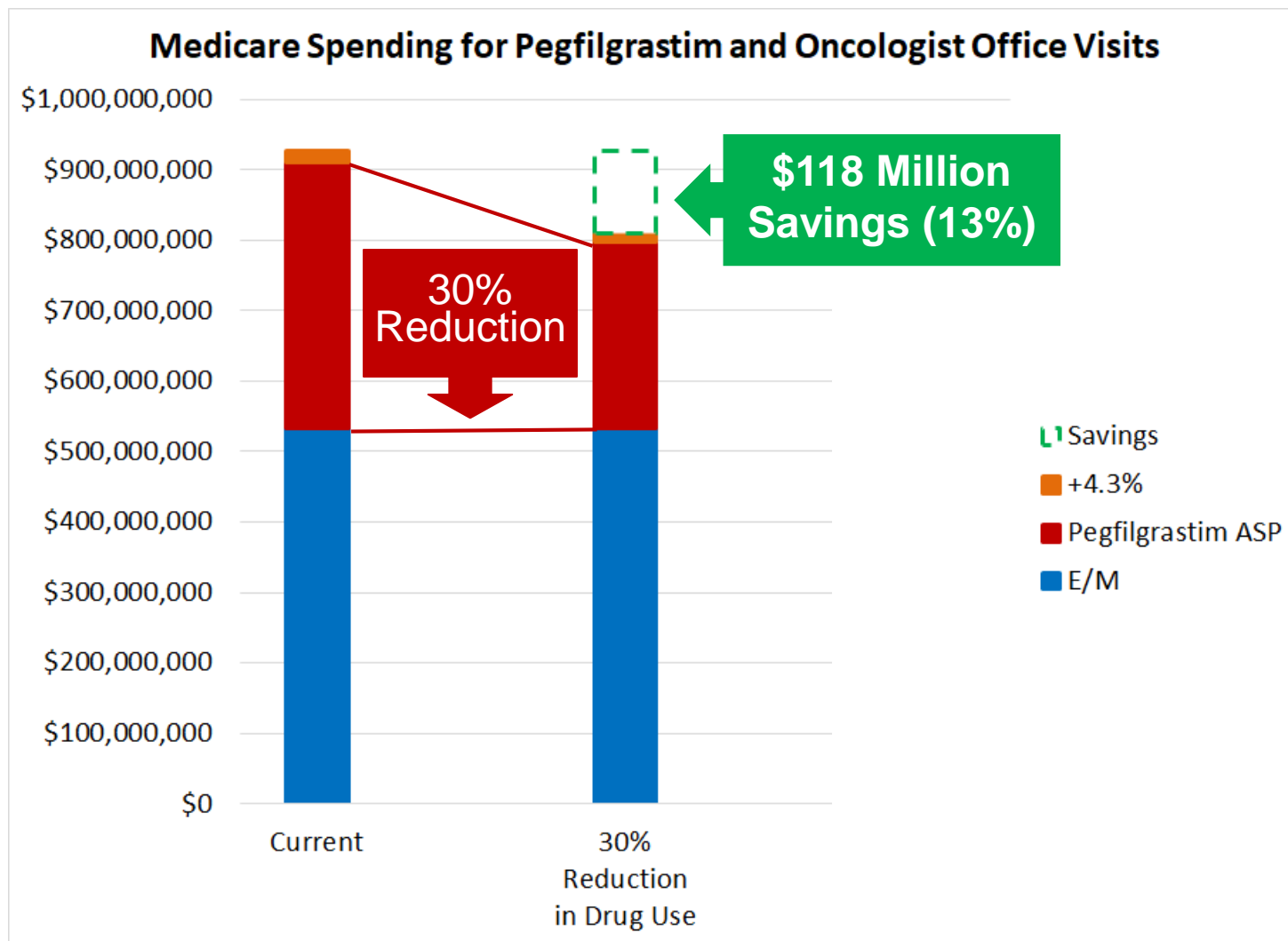
# Almost \$1 Billion in Medicare on Pegfilgrastim & E/M Office Visits



2017 Medicare Payments to Physicians in Office-Based Settings

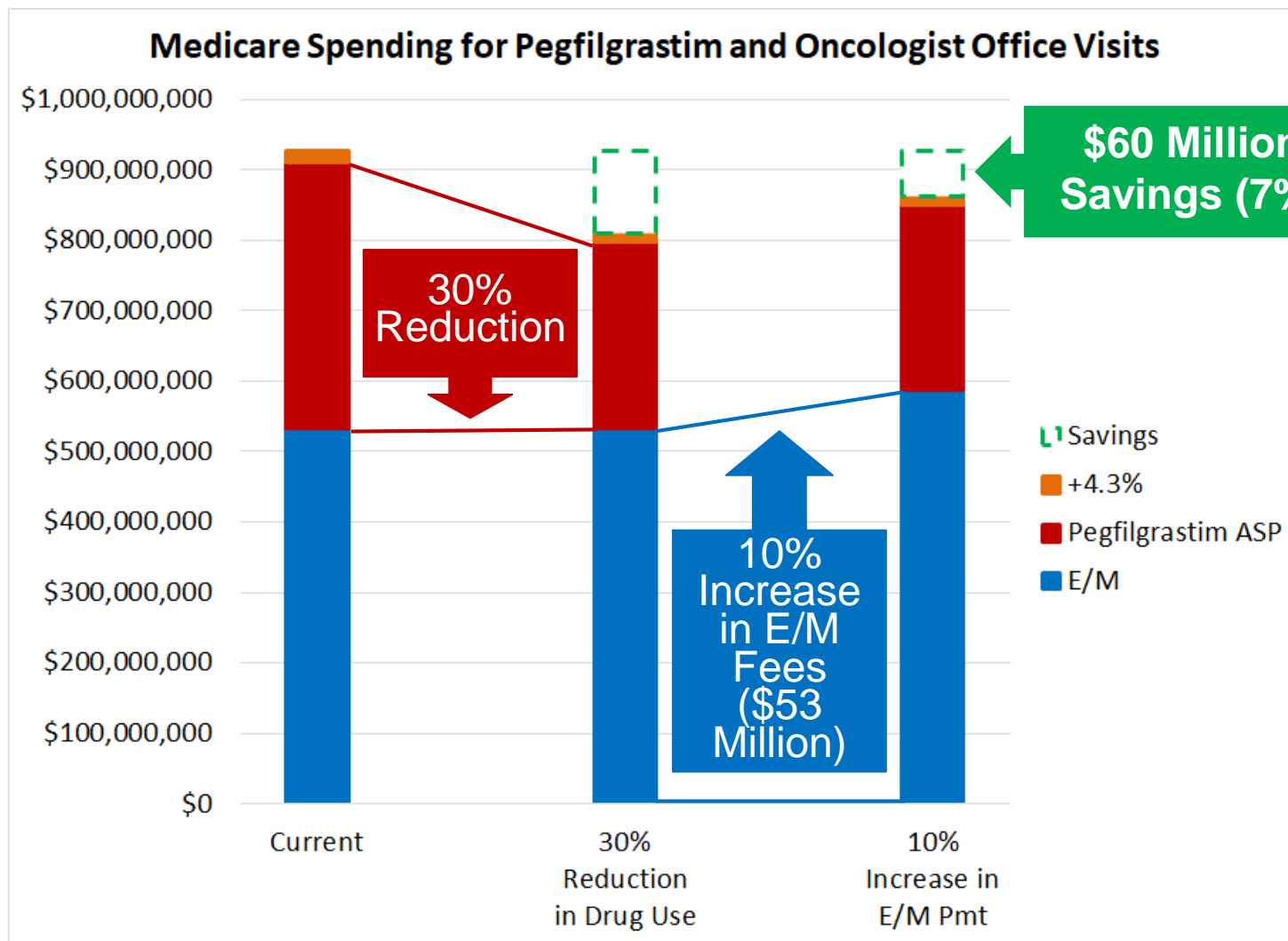


# Reducing 30% Overuse of Pegfilgrastim > \$100 million



2017 Medicare Payments to Physicians in Office-Based Settings

# You Could Increase Office Visit Fees by 10% and Still Save \$



2017 Medicare Payments to Physicians in Office-Based Settings

# Other Choosing Wisely Guidelines Could Also Saving Large \$

Original Contribution | CARE DELIVERY

## Choosing Wisely: Opportunities for Improving Value in Cancer Care Delivery?

Gabrielle B. Rocque, MD, Courtney P. Williams, MPH, Bradford E. Jackson, PhD, Audrey S. Wallace, MD, MSN, Karina I. Halliwa, MD, Kelly M. Kenzik, PhD, Edward E. Partridge, MD, and Maria Pisu, PhD

University of Alabama at Birmingham, Birmingham, AL

**Abstract**

**Introduction**  
Patients, providers, and payers are striving to identify where value in cancer care can be increased. As part of the Choosing Wisely (CW) campaign, ASCO and the American Society for Therapeutic Radiology and Oncology have recommended against specific, yet commonly performed, treatments and procedures.

**Methods**  
We conducted a retrospective analysis of Medicare claims data to examine concordance with CW recommendations across 12 cancer centers in the southeastern United States. Variability for each measure was evaluated on the basis of patient characteristics and site of care. Hierarchical linear modeling was used to examine differences in average costs per patient by concordance status. Potential cost savings were estimated on the basis of a potential 95% adherence rate and average cost difference.

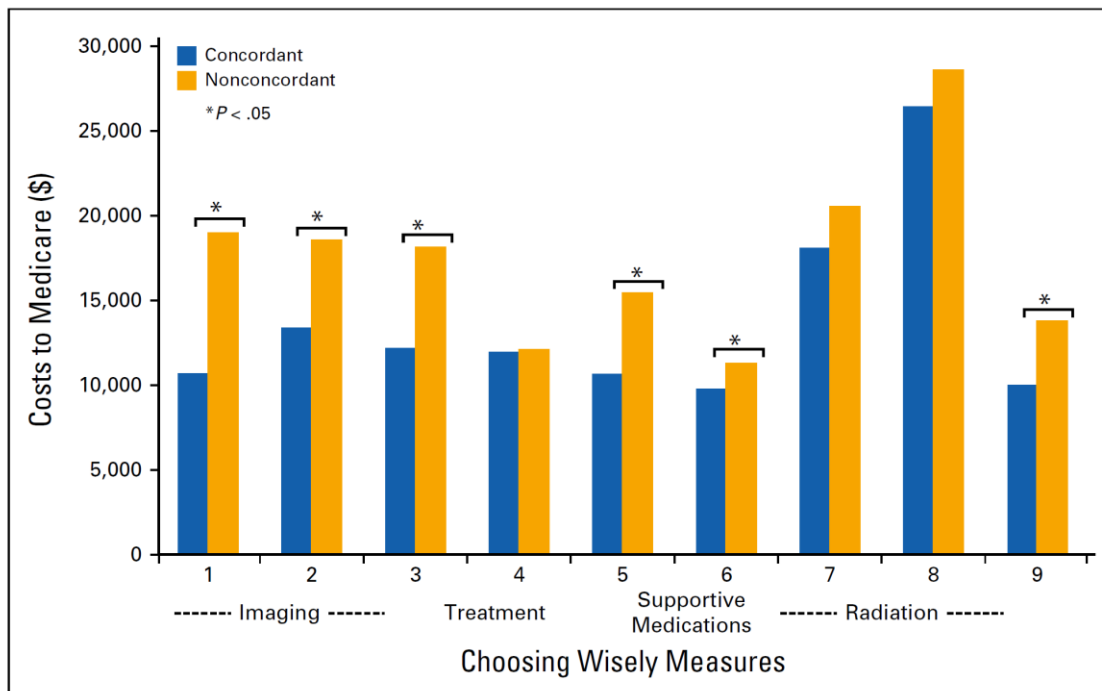
**Results**  
The analysis included 37,686 patients with cancer with Fee-for-Service Medicare insurance. Concordance varied by CW recommendation from 39% to 94%. Patient characteristics were similar for patients receiving concordant and nonconcordant care. Significant variability was noted across centers for all recommendations, with as much as an 89% difference. Nonconcordance was associated with higher costs for every measure. If concordance were to increase to 95% for all measures, we would estimate a \$19 million difference in total cost of care per quarter.

**Conclusion**  
These results demonstrate ample room for reduction of low-value care and corresponding costs associated with the CW recommendations. Because variability in concordance was driven primarily by site of care, rather than by patient factors, continued education about these low-value services is needed to improve the value of cancer care.

**ASSOCIATED CONTENT**

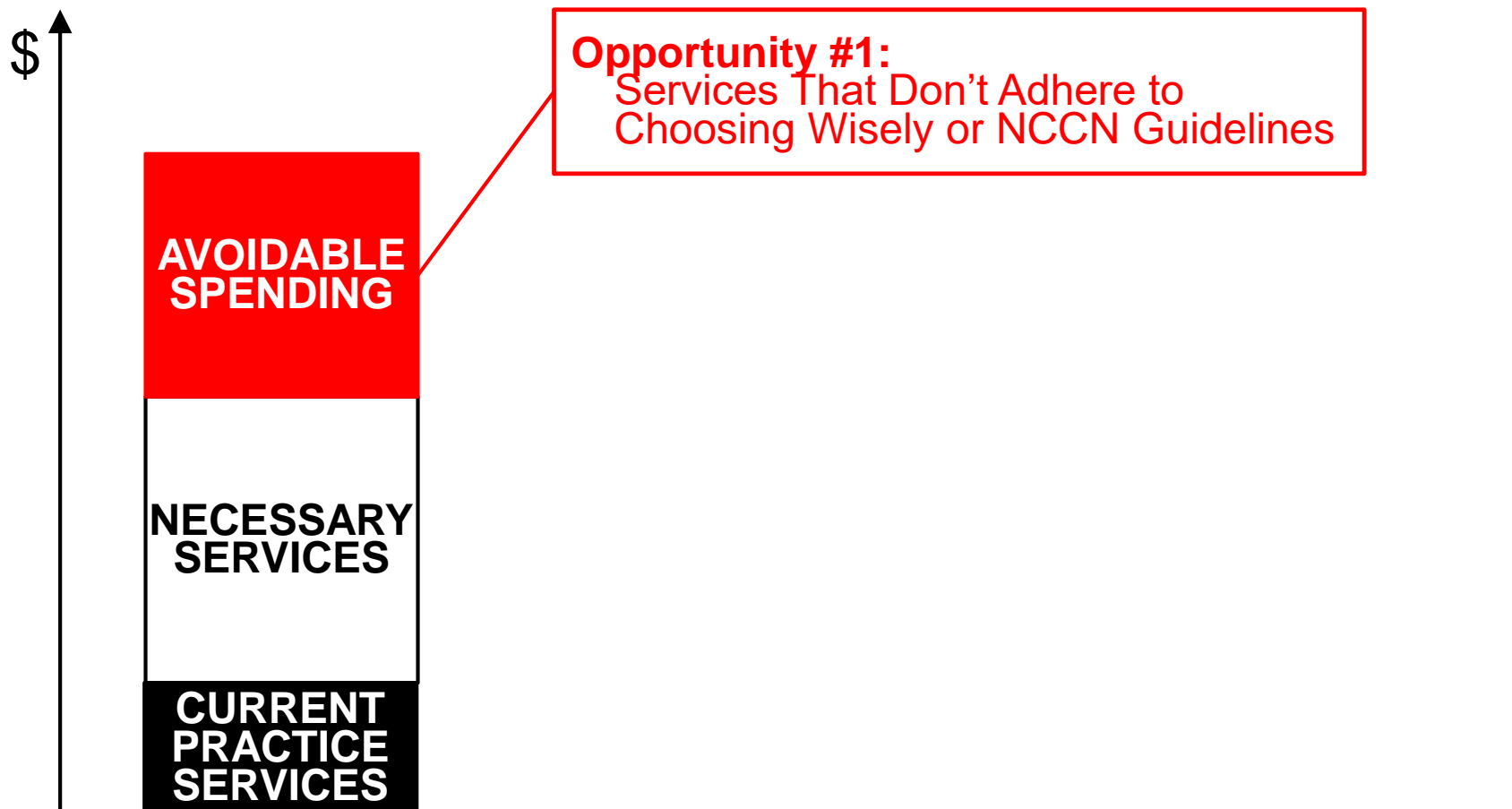
Appendix: DOI: 10.1200/JOP.2016.015396  
DOI: 10.1200/JOP.2016.015396 published online ahead of print at [ascopubs.org/journal/jop](http://ascopubs.org/journal/jop) on November 15, 2016

**INTRODUCTION**  
Because health care costs are rising at an unsustainable rate,<sup>1</sup> patients, providers, and payers are collectively striving to identify where value in cancer care can be increased and how the triple aim of better health, better health care, and lower cost can be achieved.<sup>2</sup> The American Board of Internal Medicine's Choosing Wisely (CW) campaign aims to improve value by targeting low-value services in medicine and thus increase quality of care while lowering cost.<sup>3</sup>

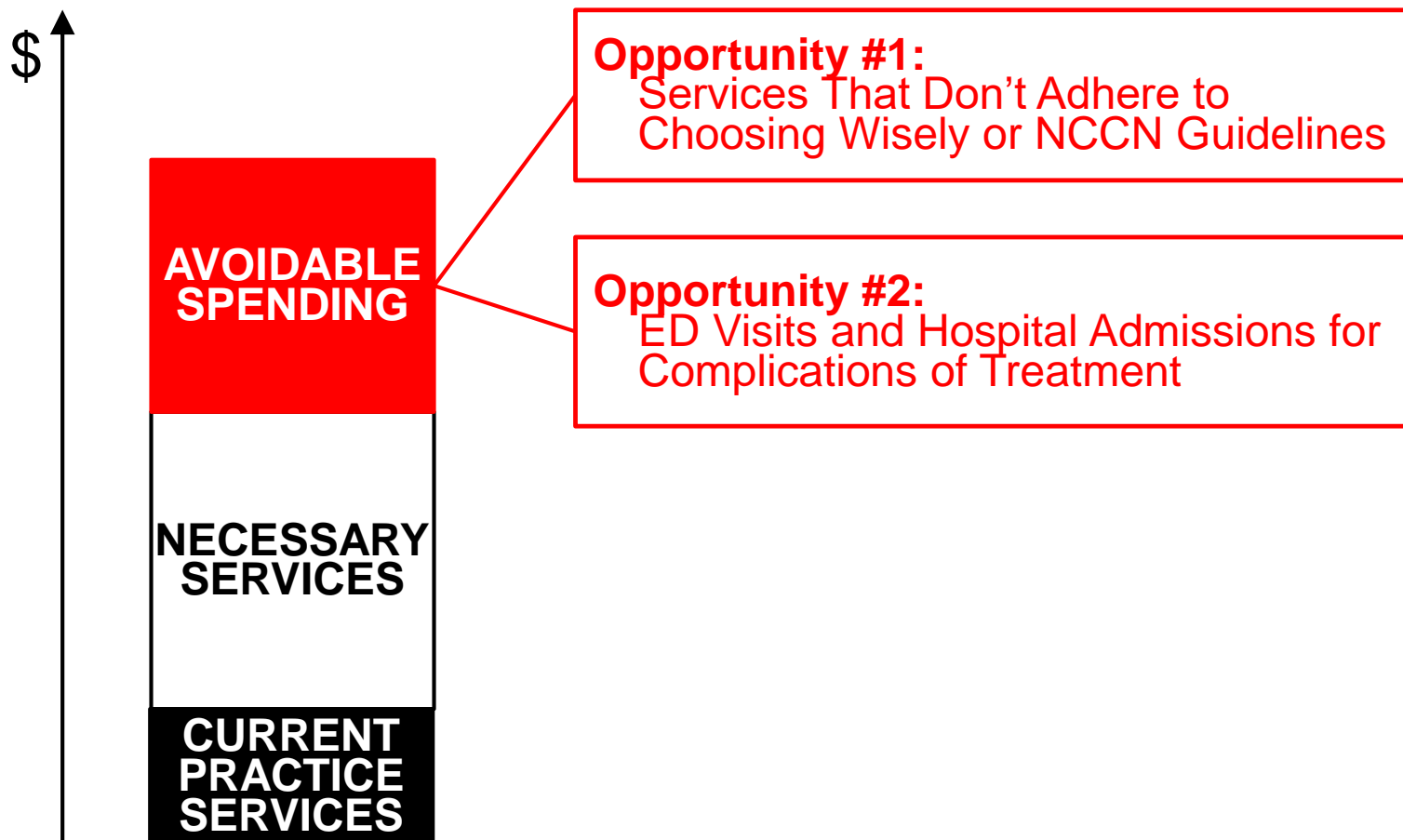


- 1: Imaging for staging prostate cancer
- 2: Imaging for staging early breast cancer
- 3: Imaging for surveillance
- 4: Use of combination chemotherapy treatment
- 5: Use of white cell-stimulating factors
- 6: Use of anti-emetics
- 7: Extended fractionation for palliation
- 8: Whole-breast radiotherapy in early stage breast cancer
- 9: IMRT for whole-breast radiotherapy

# Areas of *Avoidable* Spending in Oncology, Part 1



# Areas of *Avoidable* Spending in Oncology, Part 2



# A Significant Portion of Cancer Spending is for ED Visits/Admits

## REGIONAL VARIATION IN CANCER SPENDING

By Gabriel A. Brooks, Ling Li, Hajime Uno, Michael J. Hassett, Bruce E. Landon, and Deborah Schrag

### Acute Hospital Care Is The Chief Driver Of Regional Spending Variation In Medicare Patients With Advanced Cancer

DOI: 10.1377/hlthaff.2014.03280  
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Foundation, Inc.

**Gabriel A. Brooks** (gabriel.brooks@ch.harvard.edu) is an instructor in medicine at Harvard Medical School and a research scientist at the Dana-Farber Cancer Institute, in Boston, Massachusetts.

**Ling Li** is a data analyst and statistician at the Dana-Farber Cancer Institute.

**Hajime Uno** is an assistant professor of biostatistics at the Harvard School of Public Health and a research scientist at the Dana-Farber Cancer Institute.

**Michael J. Hassett** is an assistant professor of medicine at Harvard Medical School and a research scientist at the Dana-Farber Cancer Institute.

**Bruce E. Landon** is an associate professor in the Department of Health Care Policy at Harvard Medical School.

**Deborah Schrag** is a professor of medicine at Harvard Medical School and a research scientist at the Dana-Farber Cancer Institute.

**ABSTRACT** The root causes of regional variation in medical spending are poorly understood and vary by clinical condition. To identify drivers of regional spending variation for Medicare patients with advanced cancer, we used linked Surveillance, Epidemiology, and End Results program (SEER)-Medicare data from the period 2004-10. We broke down Medicare spending into thirteen cancer-relevant service categories. We then calculated the contribution of each category to spending and regional spending variation. Acute hospital care was the largest component of spending and the chief driver of regional spending variation, accounting for 48 percent of spending and 67 percent of variation. In contrast, chemotherapy accounted for 16 percent of spending and 10 percent of variation. Hospice care constituted 5 percent of spending. However, variation in hospice spending was fully offset by opposing variation in other categories. Our analysis suggests that the strategy with the greatest potential to improve the value of care for patients with advanced cancer is to reduce reliance on acute hospital care for this patient population.

Improving the value of health care services is a critical imperative for the US health care system. Unexplained regional variation in per capita health care spending has been identified as a marker of inefficient, low-value care.<sup>1,2</sup> However, the appropriate policy prescriptions to address regional spending variation remain uncertain. The observation that within-area spending variation is at least as substantial as between-area variation also erodes the rationale for instituting geographically targeted payment incentives.<sup>3</sup>

Instead of looking to regional spending variation as an indicator of the value of care delivered in particular geographic regions, an alternative approach is to use regional variation to better understand the processes of care that are associated with the use of high- and low-value services.<sup>4</sup> When applied to a clinically well-defined population of patients, such as patients with advanced

cancer, this approach offers the potential to identify specific clinical and policy approaches with the potential to improve the quality and efficiency of care.

Spending for cancer care in the United States exceeds \$125 billion annually.<sup>5</sup> Spending is highest for patients with advanced cancer,<sup>6</sup> a stage at which disease generally is not amenable to curative treatments. Clinicians face considerable uncertainty in choosing appropriate treatment approaches for patients with advanced cancer, and previous work has shown that there is substantial regional variation in per capita Medicare spending for this population. Furthermore, regional variation in advanced cancer spending was not associated with survival differences in elderly patients with advanced cancer,<sup>8</sup> which supports the conclusion that the marginal value of high-intensity practice patterns in the advanced cancer setting is low.

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## Original Contribution | HEALTH POLICY

### ReCAP

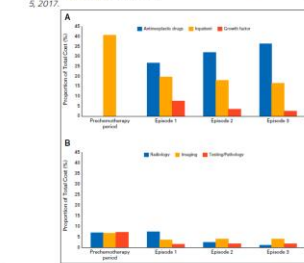
ReCAPs (Research Contributions Abbreviated for Print) provide a structured, one-page summary of each paper highlighting the main findings and significance of the work. The full version of the article is available online at [jco.ascopubs.org](http://jco.ascopubs.org).

University of Alabama at Birmingham, Birmingham University of South Alabama Mitchell Cancer Institute; University of South Alabama, Mobile, AL; and Center for Outcomes Research, JPS Health Network, Fort Worth, TX

Corresponding author: Gabrielle B. Rocque, MD, Division of Hematology and Oncology, Department of Medicine, UAB Health System Cancer Community Network, The University of Alabama at Birmingham, WTI 260, 1720 2nd Ave S, Birmingham, AL 35294; e-mail: [grocque@uabmc.edu](mailto:grocque@uabmc.edu).

Disclosures provided by the authors are available with this article at [jco.ascopubs.org](http://jco.ascopubs.org).

DOI: <https://doi.org/10.1200/JCO.2017.024935> published online ahead of print at [jco.ascopubs.org](http://jco.ascopubs.org) on October 8, 2017.



**Fig 1.** (A) Potential areas for cost reduction: proportion of inpatient, antineoplastic drugs, and growth factor total costs by Oncology Care Model time period. (B) Potential areas for cost reduction on the basis of Choosing Wisely recommendations: proportion of radiology, imaging, and testing/pathology total costs by Oncology Care Model time period.

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### Where Are The Opportunities for Reducing Health Care Spending Within Alternative Payment Models?

Gabrielle B. Rocque, Courtney P. Williams, Kelly M. Kersch, Bradford E. Jackson, Karan I. Hailoun, Margaret M. Sullivan, Rod P. Rocconi, Andres Azavedo, Elizabeth A. Aho, Warner K. Huh, Edward E. Porttidge, and Maria Pisu

**QUESTION ASKED:** What is the health care spending overall and by types of services during the prechemotherapy and initial three Oncology Care Model (OCM) episodes of care?

**SUMMARY ANSWER:** Average total health care spending in the three OCM episodes of care was \$25,630, with antineoplastic drugs accounting for 27%, 32%, and 36% of total health care spending in the first, second, and third episodes. Ten drugs, used by 31% of patients, contributed 61% to drug spending (\$18.8 million) in the first episode of care.

**WHAT WE DID:** This retrospective cohort study included Medicare beneficiaries ≥ 65 years of age who received antineoplastic therapy at 12 cancer centers in the Southeast from 2012 to 2014. We quantified overall and service-specific health care spending during the prechemotherapy period (from cancer diagnosis to antineoplastic therapy initiation) and within the OCM 6-month episodes of care.

triggered by initiation and continuation of antineoplastic therapy.

**WHAT WE FOUND:** Within our sample population of 3,427 patients, health care spending over all three OCM episodes totaled > \$157 million. Average total health care spending in the three OCM episodes of care was \$33,838 (n = 3,427), \$23,811 (n = 1,207), and \$19,241 (n = 678). Although inpatient spending accounted for the greatest percentage (41%) of the total in the prechemotherapy period, antineoplastic drug spending accounted for the largest percentage (27% to 36%) of health care spending within the OCM, totaling \$44.9 million over all three episodes (Fig). Drug spending was driven by a small number of commonly administered medications, with 10 drugs used by 31% of patients contributing 61% to drug spending (\$18.8 million) in the first episode of care.

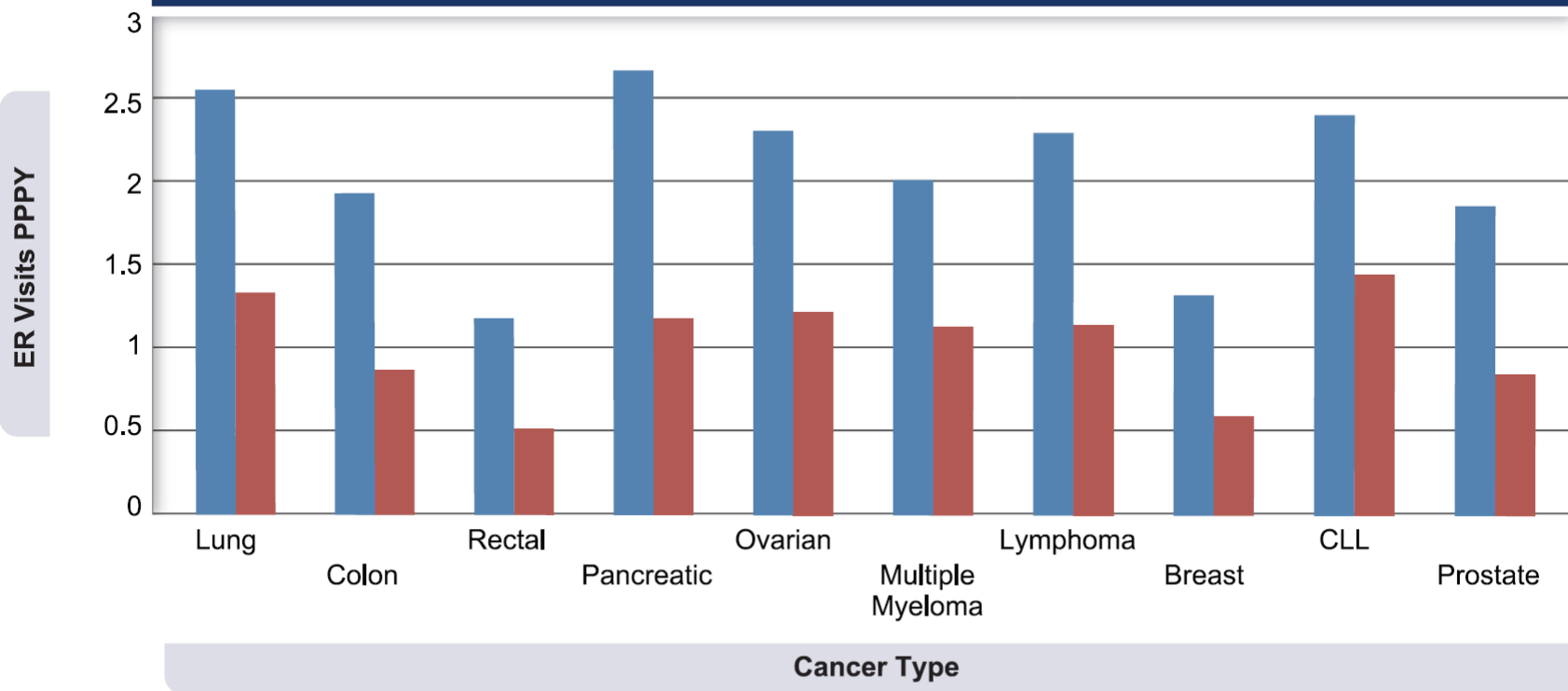
**BIAS, CONFOUNDING FACTORS), REAL-LIFE IMPLICATIONS:** Administrative claims data are designed for billing rather than research, which affects the ability to evaluate relevant clinical factors. This study was conducted in the Southeastern United States, which may not reflect other geographic regions.

This study highlights the need to consider interventions that target both types of health care spending and the need for protections in payment models to ensure that physicians are not held accountable for drug price increases beyond their control. [DOI: 10.1200/JCO.2017.024935](https://doi.org/10.1200/JCO.2017.024935)

**ED visits and inpatient admissions represent 10-30% of spending during chemotherapy and radiation therapy for cancer**

# High Frequency of ED Visits, 40-50% Are Treatment-Related

Figure 12 - Emergency Room Utilization of Chemotherapy Patients

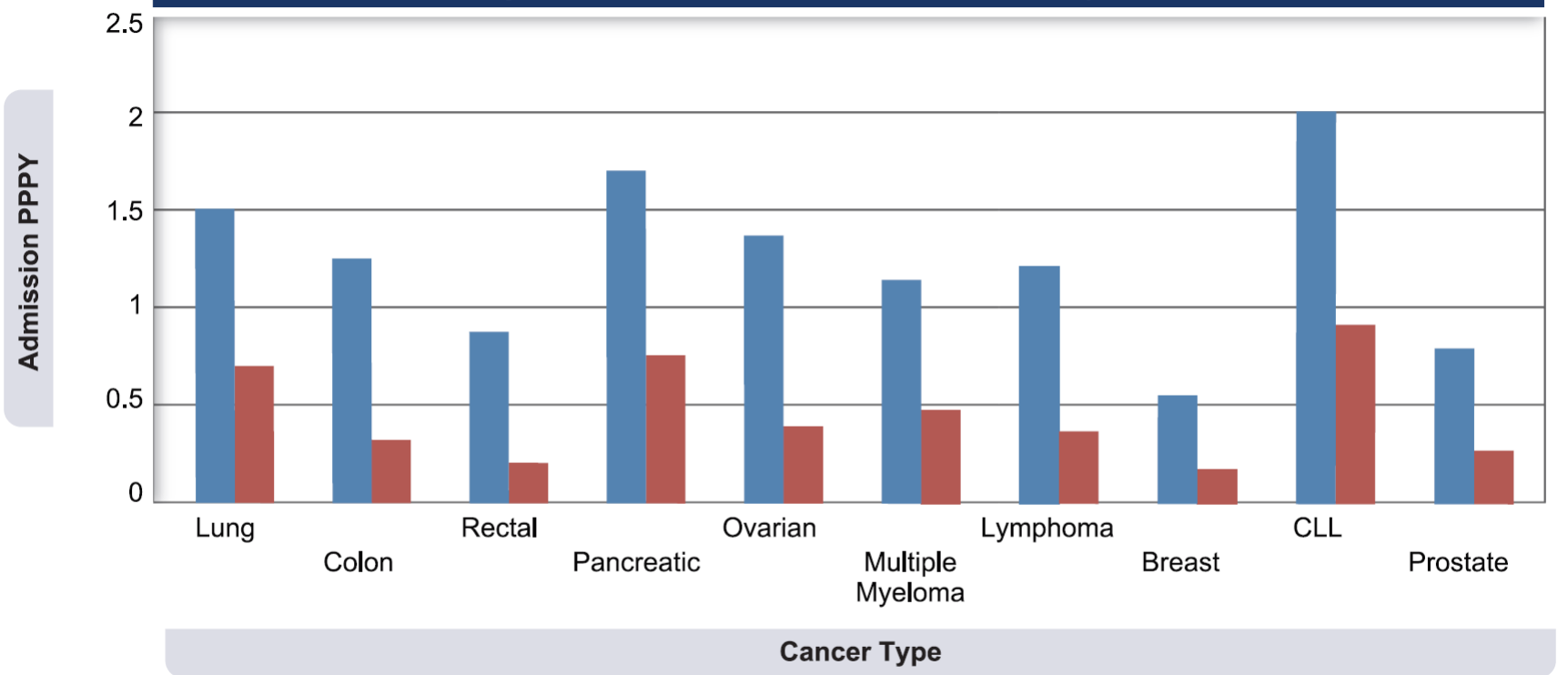


SOURCE:  
 Fitch K and Pyenson B,  
*Cancer Patients Receiving Chemotherapy:  
 Opportunities for Better Management*,  
 Milliman (March 30, 2010)

■ ER Visits Per Patient Per Year  
 ■ ER Chemotherapy-Related Visits Per Patient Per Year

# Many Unplanned Hospital Admissions Related to Treatment

Figure 11 - Inpatient Utilization of Chemotherapy Patients



SOURCE:  
 Fitch K and Pyenson B,  
*Cancer Patients Receiving Chemotherapy:  
 Opportunities for Better Management*,  
 Milliman (March 30, 2010)

■ Inpatient Admits Per Patient Per Year  
 ■ Inpatient Chemotherapy-Related Admits Per Patient Per Year



# Large Reductions in ED Visits & Hospitalizations Are Possible

## How We Do It

### Oncology patient-centered medical home and accountable cancer care

John D. Sprandio, MD

Consultants in Medical Oncology and Hematology, PC, Drexel Hill, PA

With the passage of healthcare reform and the call for improved quality, value, and demonstration of results, the primary care patient-centered medical home (PCMH) concept has gained considerable traction across the United States. In 2004, we began re-engineering our processes of cancer care delivery in our medical oncology practice concurrently with the implementation of an oncology-specific electronic medical record and the development of customized software to better suit practice/patient needs and to facilitate data collection. These custom software applications were designed to support comprehensive processes of care that were also required for level III medical home recognition by the National Committee for Quality Assurance (NCQA). We have been tracking our data for the past 5 years, documenting improvements in disease management—*notably the reduction in emergency room utilization and hospital admissions.* We have engaged local and national payers with the goal of developing collaborative pilot programs. Furthermore, we are establishing formalized relationships with other like-minded medical oncology and primary care PCMH practices, as we continue to refine our delivery of cancer care within an oncology PCMH model.

Medical oncologists are playing an ever-expanding role in the delivery of cancer care. The current and future challenges they face in their efforts to deliver effective, efficient, and appropriate cancer care are broad, and solutions to the rising costs of cancer care continue to be sought. The patient-centered medical home (PCMH) model has emerged as a partial solution to the fragmented delivery of primary healthcare. In many instances, the delivery of cancer care is also fragmented—fraught with deficiencies in communication, coordination, and accountability. The oncology PCMH (OPCMH) model of cancer care may potentially serve as a practice framework for oncologists. The OPCMH model attempts to promote a value-based agenda that facilitates physician accountability, encourage clinical integration between like-minded medical oncology groups, enhance communication and coordination of care with primary care PCMH models, and collaborate with payers while maintaining a focus on patient needs and evidence-based care.

#### A backward glance at the PCMH model

A combination of factors has led to the rapid acceptance of the PCMH model in the delivery of primary care: (1) physician and patient recognition of the PCMH model as a partial solution to the unacceptable fragmentation of healthcare delivery; (2) the availability of electronic medical records (EMRs) and the actionable information that can be mined from clinical databases; (3) the alignment of incentives among stakeholders, including the largest employers in the United States, medical professional societies, consumers, insurance companies, academic institutions, patient advocacy groups, state Medicaid agencies, and the Centers for Medicare & Medicaid Services; and (4) early results from medical home demonstration projects, suggesting that elements of the model may have a positive effect on quality, cost, and satisfaction of the patient and clinical team.<sup>1,2</sup>

#### Unacceptable fragmentation of care

In order to address the fragmentation of care, there are a number of actions that physicians should take:

care for patients across the continuum, improve the coordination of care, establish a standardized comprehensive process of care, adhere to established practice guidelines, utilize a care-team approach, engage and educate patients to enhance involvement in their care, and create innovative ways of communicating with all parties involved.

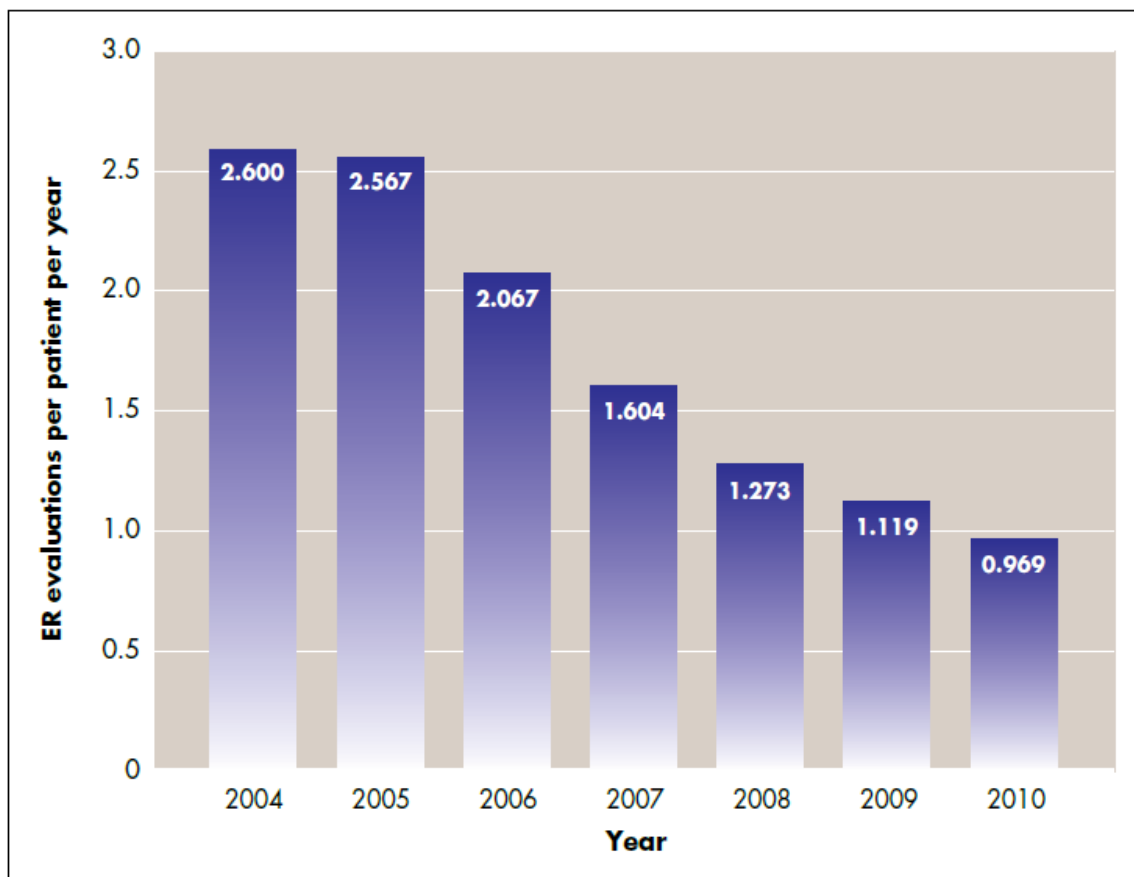
#### EMR systems

When fully implemented and enhanced, EMR systems have the potential to promote a culture of continuous improvement that creates practice efficiencies. Furthermore, EMRs can potentially allow physicians to concentrate on their primary responsibilities of making complex medical decisions based on real time, evidence-based data while establishing and maintaining personal relationships with their

Manuscript received November 16, 2010; accepted December 3, 2010.

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Commun Oncol 2010;7:565-572



**FIGURE 3** Average emergency room (ER) evaluations at Delaware County Memorial Hospital of the Drexel Hill office population per chemotherapy patient per year, 2004–2010 (YTD).

# Reductions in ED Visits/Admits Will Reduce Spending

## MEDICARE INNOVATION

By Erin Murphy Colligan, Erin Ewald, Sarah Ruiz, Michelle Spafford, Caitlin Cross-Barnet, and Shriram Parashuram

### Innovative Oncology Care Models Improve End-Of-Life Quality, Reduce Utilization And Spending

**ABSTRACT** Three models that received Health Care Innovation Awards from the Centers for Medicare and Medicaid Services (CMS) aimed to reduce the cost and use of health care services and improve the quality of care for Medicare beneficiaries with cancer. Each emphasized a different principle: the oncology medical home, patient navigation, or palliative care. Comparing participants in each model who died during the study period to matched comparators, we found that the oncology medical home and patient navigation models were associated with decreased costs in the last ninety days of life (\$3,346 and \$5,824 per person, respectively) and fewer hospitalizations in the last thirty days of life (fifty-seven and forty per 1,000 people, respectively). The patient navigation model was also associated with fewer emergency department visits in the last thirty days of life and increased hospice enrollment in the last two weeks of life. These promising results can inform new initiatives for cancer patients, such as the CMS Oncology Care Model.

**M**edicare expenditures in the last year of life for beneficiaries with cancer range from \$56,784 for those with melanoma to \$140,891 for those with brain cancer. These far exceed the average \$38,975 per beneficiary Medicare spending in the last year of life.<sup>1,2</sup> There were approximately 901,000 Medicare beneficiaries with cancer in the last year of life in 2010, and that number is expected to increase to 1.2 million in 2020.<sup>1</sup> Total costs of cancer care in the last year of life amounted to \$37 million in 2010 and will approach \$50 million in 2020.<sup>3</sup> Much end-of-life spending results from high rates of hospitalizations, emergency department (ED) visits, and stays in the intensive care unit in patients' last months.<sup>4,5</sup> A substantial proportion of hospitalizations and ED visits at the end of life are avoidable and thus represent an area for improved quality of care and patient satisfaction and for reduced utilization.<sup>6-9</sup>

High utilization of cancer treatment at the end of life not only poses a burden to the health care system, but it also may represent poor outcomes from the perspective of patients. Previous studies suggest that patients with advanced cancer prefer to have less aggressive treatment and more spiritual support and palliative care, and to avoid intensive inpatient settings at the end of life.<sup>10,11</sup> In fact, the National Quality Forum has recognized the need to emphasize the importance of palliative options for cancer care at the end of life. It has endorsed the use of several measures as indicators of poor quality of care at the end of life, such as the use of chemotherapy in the last fourteen days of life, multiple ED visits and stays in the intensive care unit in the last thirty days of life, and enrollment in hospice for fewer than three days.<sup>12</sup>

Though hospice is designed to facilitate patients' end-of-life preferences, keeping patients at home or in a nonclinical environment while reducing pain and psychological stress and pro-

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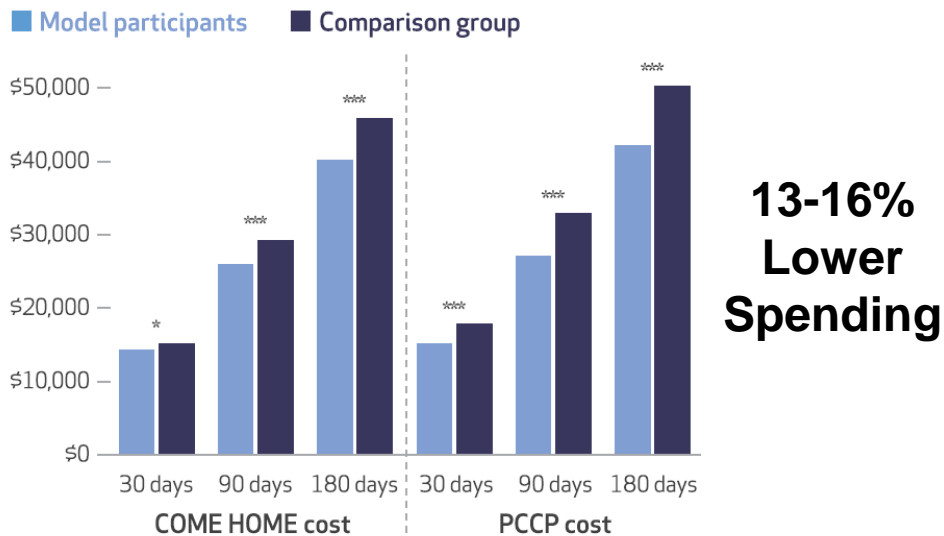
**Erin Ewald** is a research scientist at NQRC at the University of Chicago in Bethesda, Maryland.

**Sarah Ruiz** is a senior scientist at the National Institute on Disability, Independent Living, and Rehabilitation Research, in Washington, D.C. This work was completed while she was a senior research scientist at NQRC at the University of Chicago.

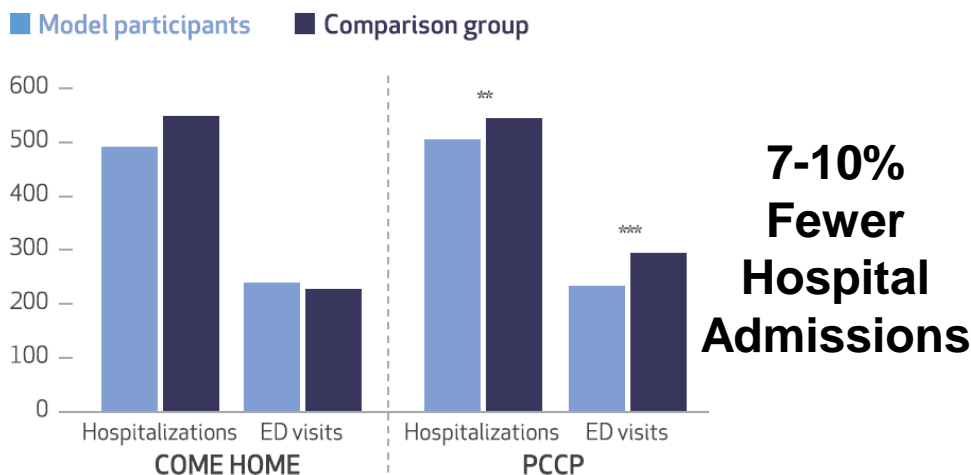
**Michelle Spafford** (spafford-michelle@nqrc.org) is a research scientist at NQRC at the University of Chicago.

**Caitlin Cross-Barnet** is a social science research analyst at the Center for Medicare and Medicaid Innovation.

**Shriram Parashuram** is a principal health economist at NQRC at the University of Chicago.

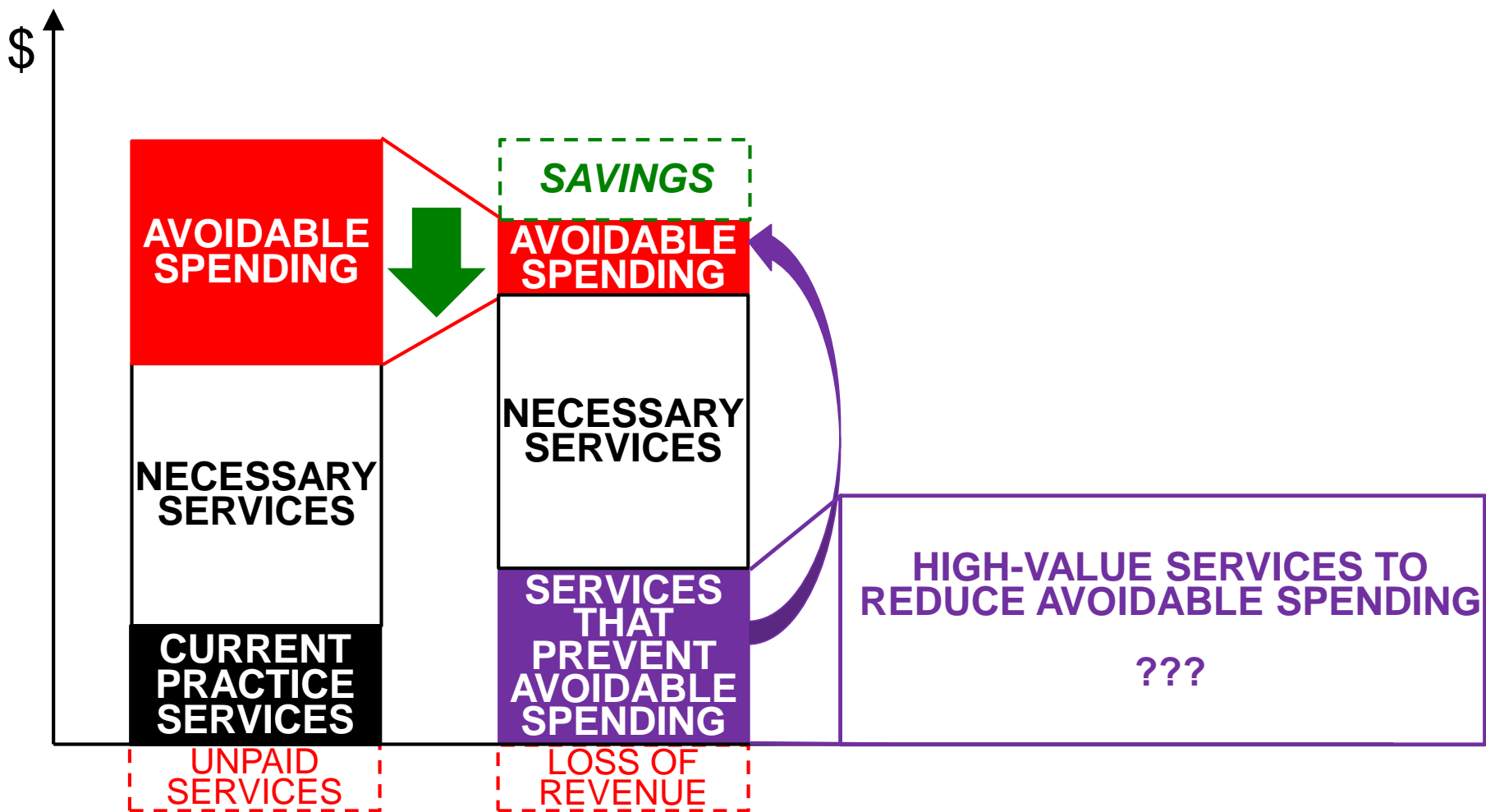


**13-16% Lower Spending**



**7-10% Fewer Hospital Admissions**

# Step 2a: Design Services That Will Reduce Avoidable Spending



# Changes in Care Delivery to Reduce Avoidable Spending

<b>Opportunity for Higher-Value Care</b>	<b>Change in Care Delivery Needed</b>
<p><b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b></p>	
<p><b>Reduce ED visits and hospital admissions for treatment-related complications</b></p>	

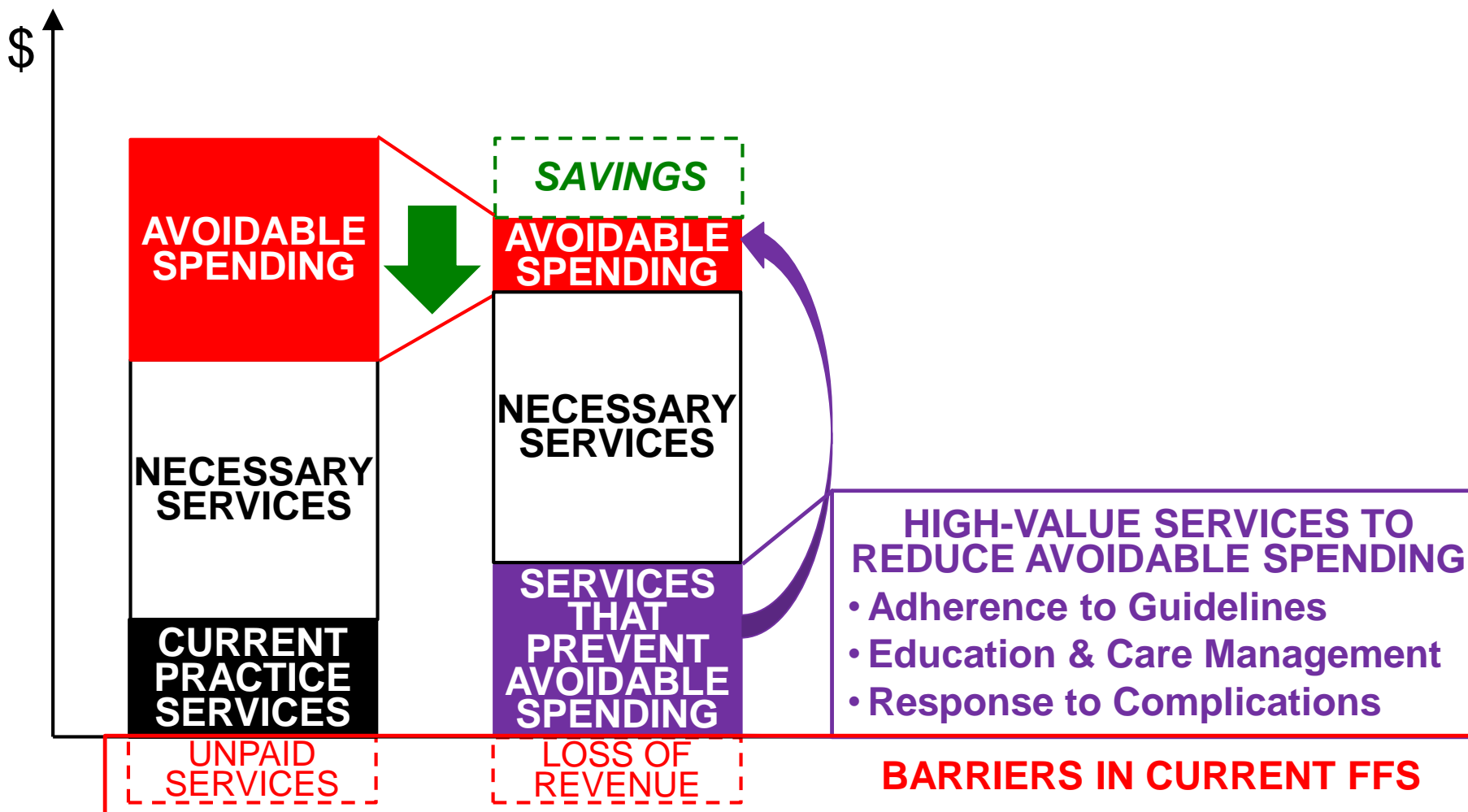
# Changes in Care Delivery to Reduce Avoidable Spending

Opportunity for Higher-Value Care	Change in Care Delivery Needed
<p><b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b></p>	<p>Determination of which treatments are consistent with current evidence or guidelines</p>
	<p>Reduction in use of expensive drugs or radiation treatments that are currently overused</p>
<p><b>Reduce ED visits and hospital admissions for treatment-related complications</b></p>	

# Changes in Care Delivery to Reduce Avoidable Spending

Opportunity for Higher-Value Care	Change in Care Delivery Needed
<p><b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b></p>	<p>Determination of which treatments are consistent with current evidence or guidelines</p>
	<p>Reduction in use of expensive drugs or radiation treatments that are currently overused</p>
<p><b>Reduce ED visits and hospital admissions for treatment-related complications</b></p>	<p>Patient education and proactive monitoring</p>
	<p>24/7 triage and patient assistance</p>
	<p>Office-based IV hydration</p>

# Step 2b: Identify Barriers in FFS to Delivery of High-Value Services



# What's Stopping Practices From Doing This Today?

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	
	Reduction in use of expensive drugs or radiation treatments that are currently overused	
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	
	24/7 triage and patient assistance	
	Office-based IV hydration	



# Lack of Payment for the Services Needed

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<p><b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b></p>	<p>Determination of which treatments are consistent with current evidence or guidelines</p>	<p>No payment for time spent outside of office visits to plan patient treatment</p>
	<p>Reduction in use of expensive drugs or radiation treatments that are currently overused</p>	
<p><b>Reduce ED visits and hospital admissions for treatment-related complications</b></p>	<p>Patient education and proactive monitoring</p>	
	<p>24/7 triage and patient assistance</p>	
	<p>Office-based IV hydration</p>	

# Loss of Revenue From Using Fewer High-Margin Services

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	
	24/7 triage and patient assistance	
	Office-based IV hydration	

# Lack of Payment for the Services Needed

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services
	24/7 triage and patient assistance	
	Office-based IV hydration	

# Lack of Payment for the Services Needed

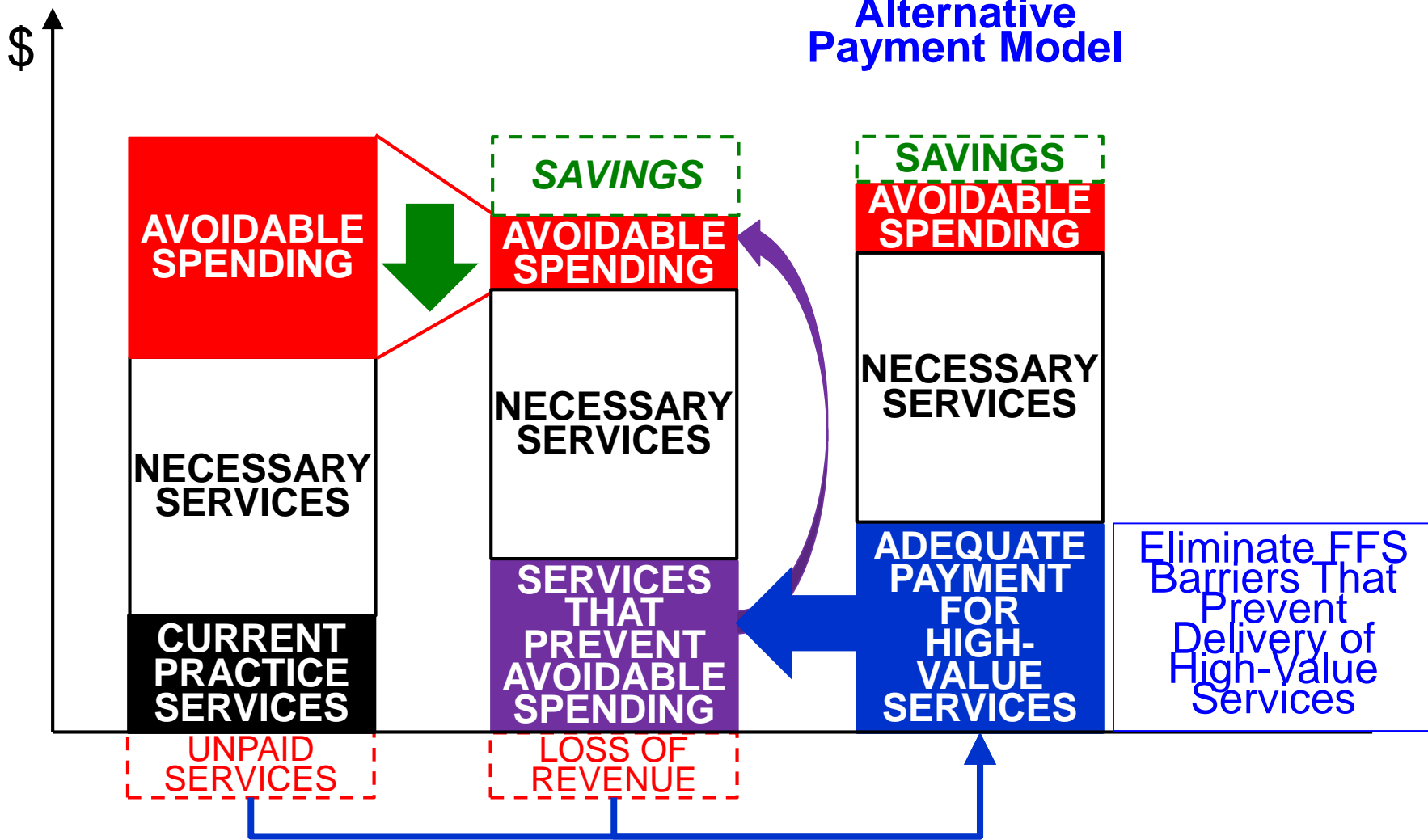
Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment
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	24/7 triage and patient assistance	No fees for call response & triage
	Office-based IV hydration	

# Loss of Revenue From Using Fewer High-Margin Services

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services
	24/7 triage and patient assistance	No fees for call response & triage
	Office-based IV hydration	Lower payments for IV hydration than for IV chemotherapy

# Step 3: Pay Adequately to Support Higher-Value Services

## Alternative Payment Model



# Eliminating the Barriers in the Current Payment System

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System	Changes in Payment Needed
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment	
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used	
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services	
	24/7 triage and patient assistance	No fees for call response & triage	
	Office-based IV hydration	Lower payments for IV hydration than for IV chemotherapy	

# Pay Adequately for High-Value Services

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System	Changes in Payment Needed
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment	Payment for treatment planning
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used	
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services	
	24/7 triage and patient assistance	No fees for call response & triage	
	Office-based IV hydration	Lower payments for IV hydration than for IV chemotherapy	



# Pay Adequately for High-Value Services

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System	Changes in Payment Needed
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment	Payment for treatment planning
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used	
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services	Payment for patient education and monitoring services
	24/7 triage and patient assistance	No fees for call response & triage	
	Office-based IV hydration	Lower payments for IV hydration than for IV chemotherapy	

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# Reduce the Need and Opportunity for High Profits on Drugs

Opportunity for Higher-Value Care	Change in Care Delivery Needed	Barriers in Current Payment System	Changes in Payment Needed
<b>Reduce/eliminate use of expensive tests and treatments that are not based on evidence</b>	Determination of which treatments are consistent with current evidence or guidelines	No payment for time spent outside of office visits to plan patient treatment	Payment for treatment planning
	Reduction in use of expensive drugs or radiation treatments that are currently overused	Practice revenues will decrease if fewer expensive drugs and treatments are used	Eliminate need to cross-subsidize services with drug margins
<b>Reduce ED visits and hospital admissions for treatment-related complications</b>	Patient education and proactive monitoring	No fees for patient education and monitoring services	Payment for patient education and monitoring services
	24/7 triage and patient assistance	No fees for call response & triage	Payment for call response & triage
	Office-based IV hydration	Lower payments for IV hydration than for IV chemotherapy	Higher payment for IV hydration

# How Do You Implement the Payment Changes?

## Changes in Payment Needed

Payment for treatment planning

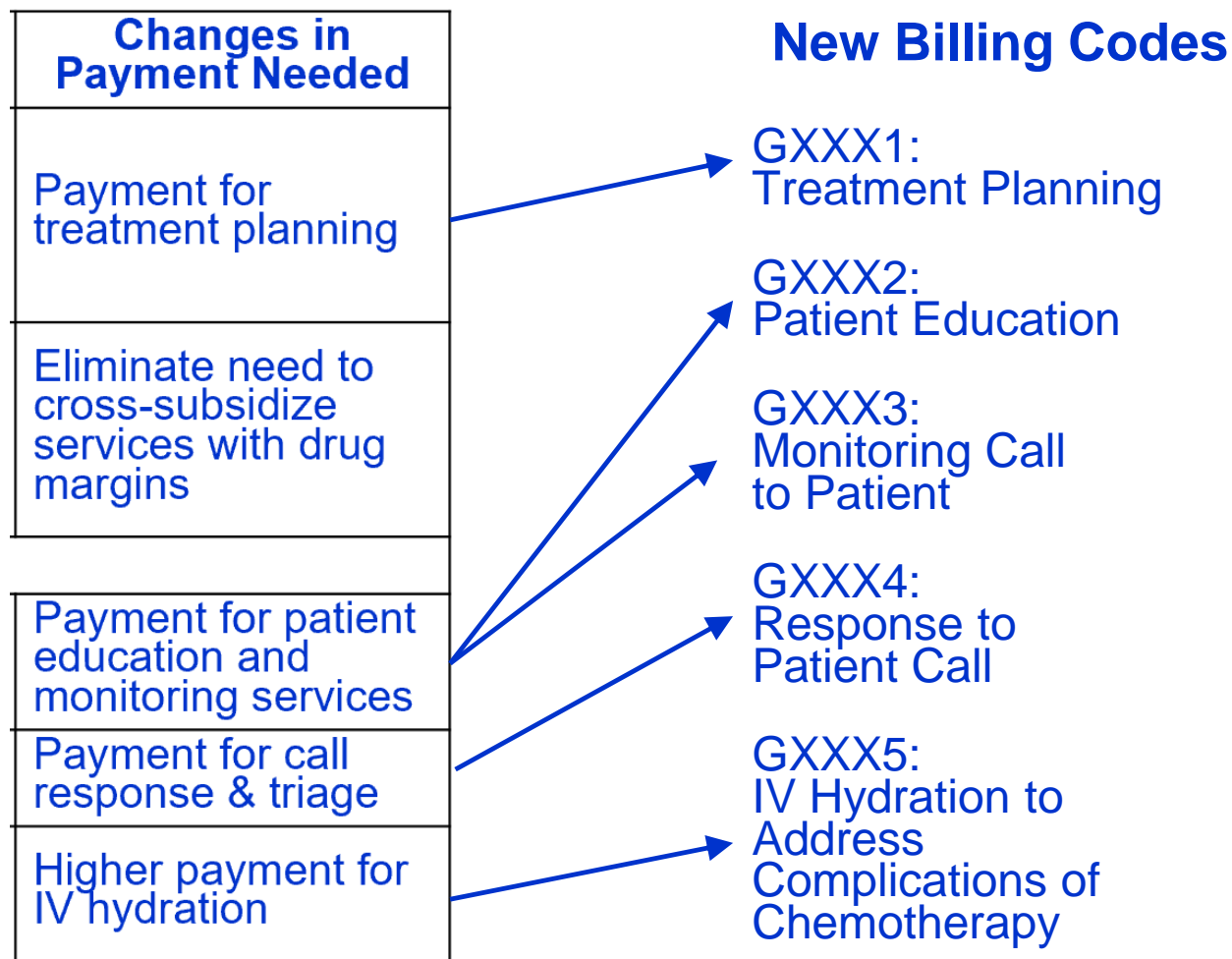
Eliminate need to cross-subsidize services with drug margins

Payment for patient education and monitoring services

Payment for call response & triage

Higher payment for IV hydration

# Option 1: Create New Billing Codes for Unpaid Services



# Do You Want Even More Fees for Narrowly-Defined Services?

## 60+ Codes Billed >100,000 Times Per Year

99204 New Patient Office Visit – Level 4	77300 Calculation of radiation therapy dose
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## New Billing Codes

**GXXX1:**  
Treatment Planning

**GXXX2:**  
Patient Education

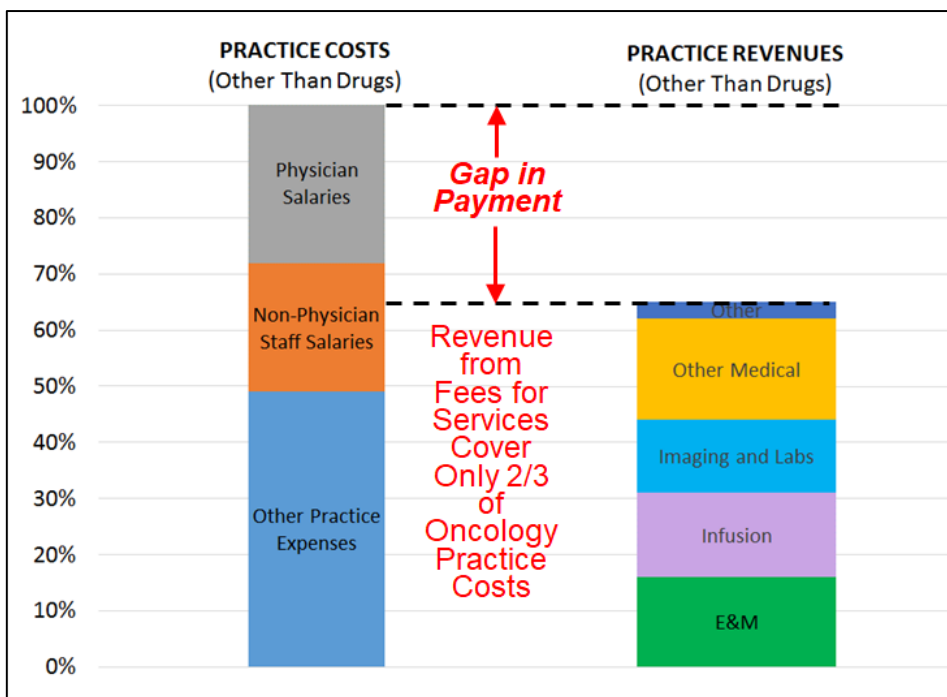
**GXXX3:**  
Monitoring Call to Patient

**GXXX4:**  
Response to Patient Call

**GXXX5:**  
IV Hydration to Address Complications of Chemotherapy

# The Problems With Fee for Service

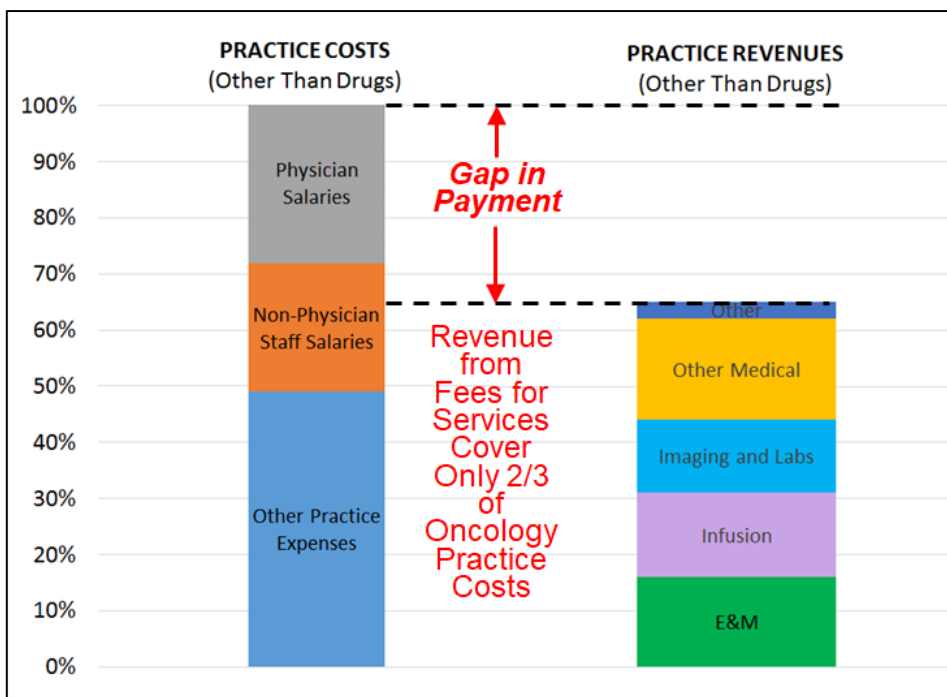
## Current Fees Don't Cover Practice Costs



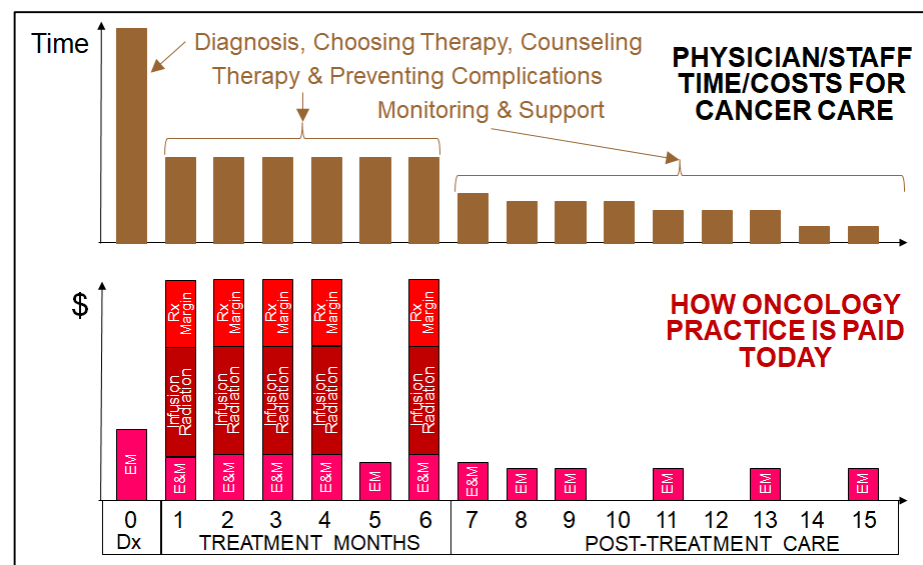


# The Problems With Fee for Service

## Current Fees Don't Cover Practice Costs



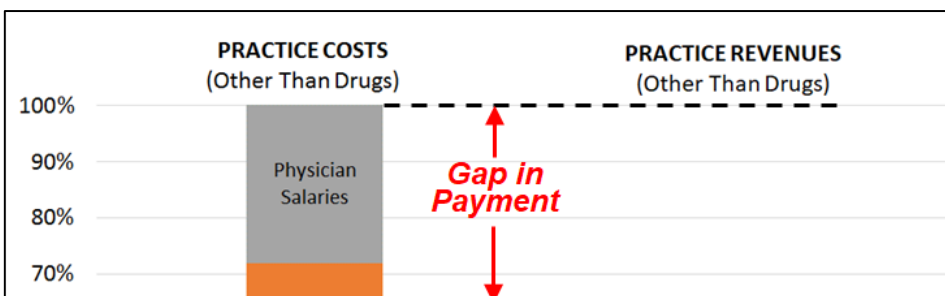
## Current Fees Don't Align With the Care Patients Need



# The Problems With Fee for Service

## Current Fees Don't Cover Practice Costs

## Current Fees Don't Align With the Care Patients Need



**The fees that a practice is paid for narrowly-defined services will never be correct because most practice costs are fixed – personnel, rent, etc.**

**Costs won't change much based on whether the practice delivers one more or one fewer service, but under current FFS, profits will increase dramatically if patients receive unnecessary services and losses will increase if patients receive fewer services.**

# Option 2: Replace Current Fees With “Patient-Centered Payments”

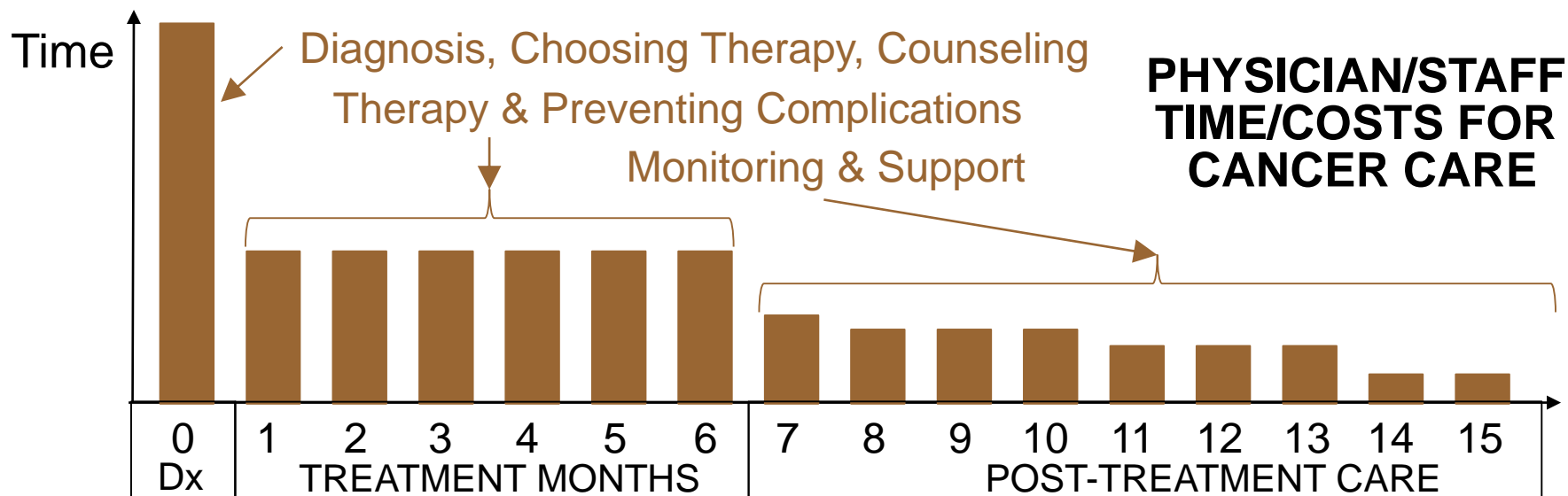
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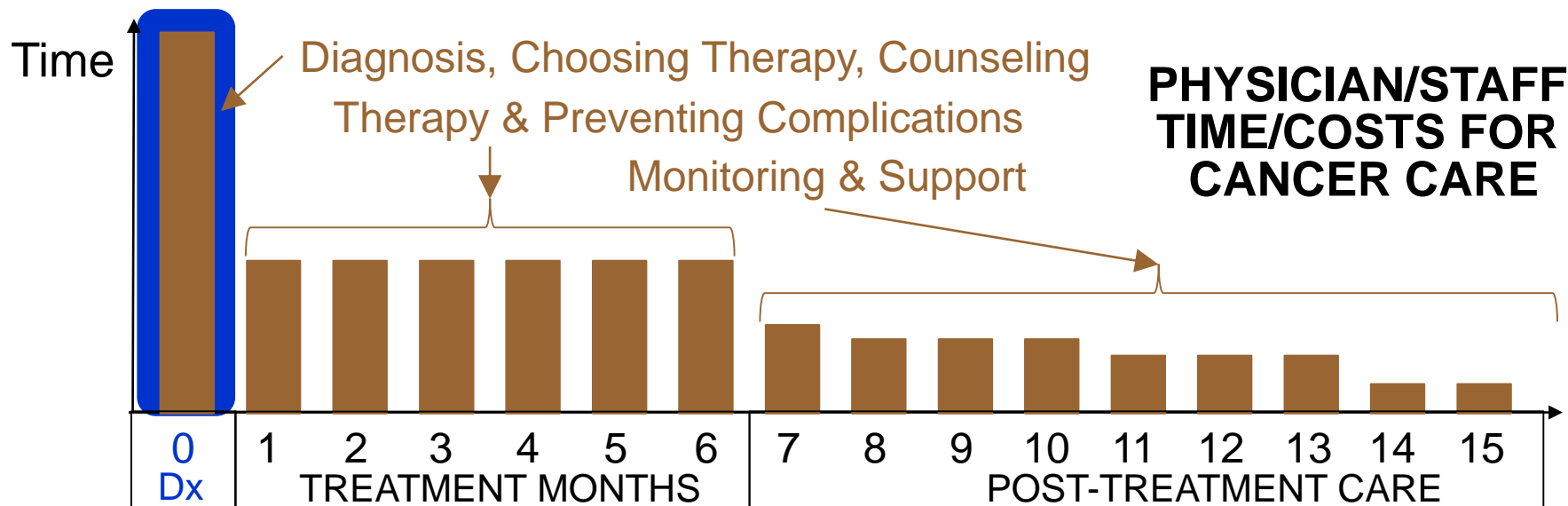
## Patient-Centered Payment

1. New Patient Assessment and Treatment Planning Payment
2. Monthly Payment for Treatment and Care Mgt
3. Monthly Payment for Post-Treatment Survivorship Care
4. Monthly Payment for End-of-Life Support

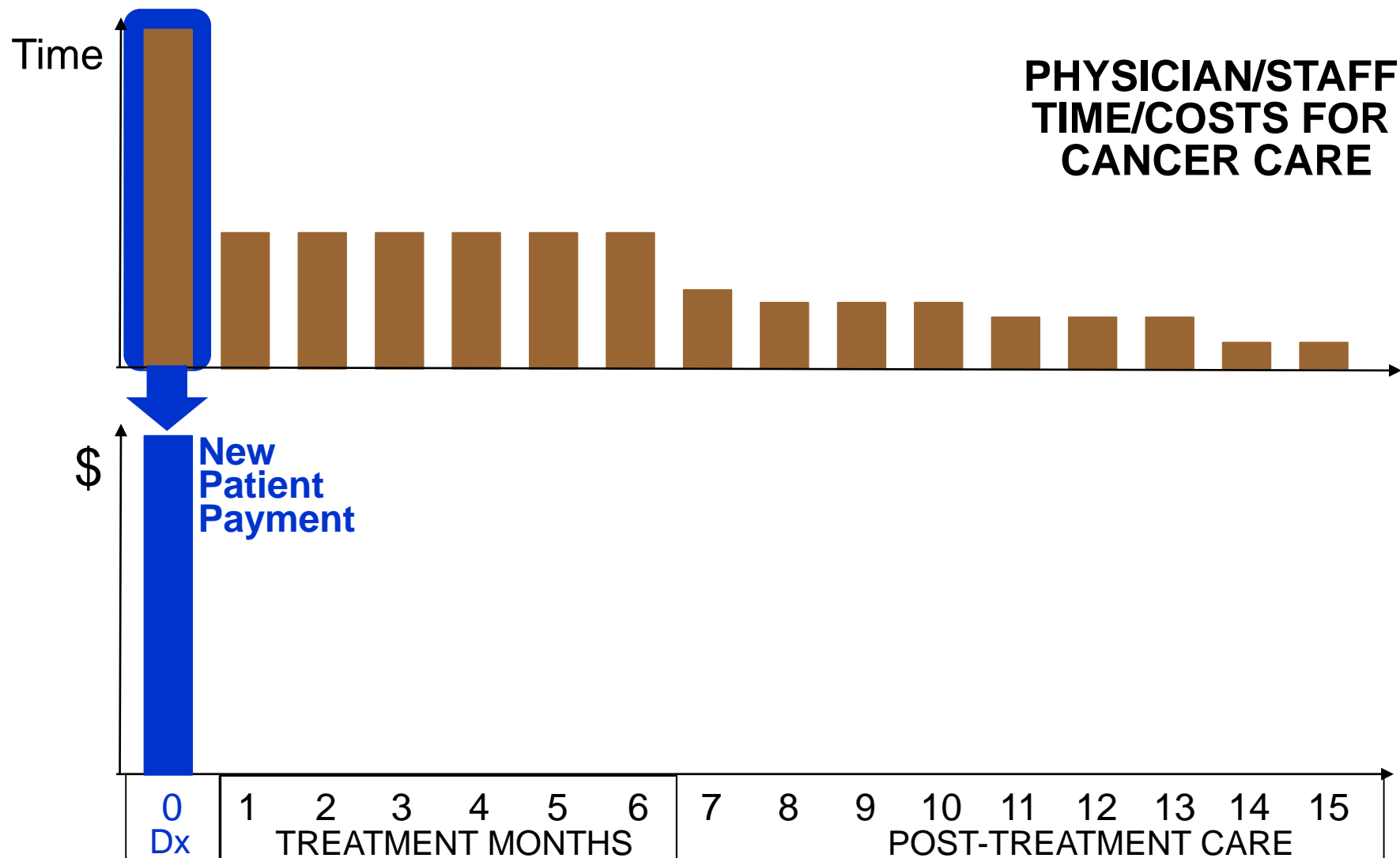
# Start With How Oncology Practices Spend Their Time



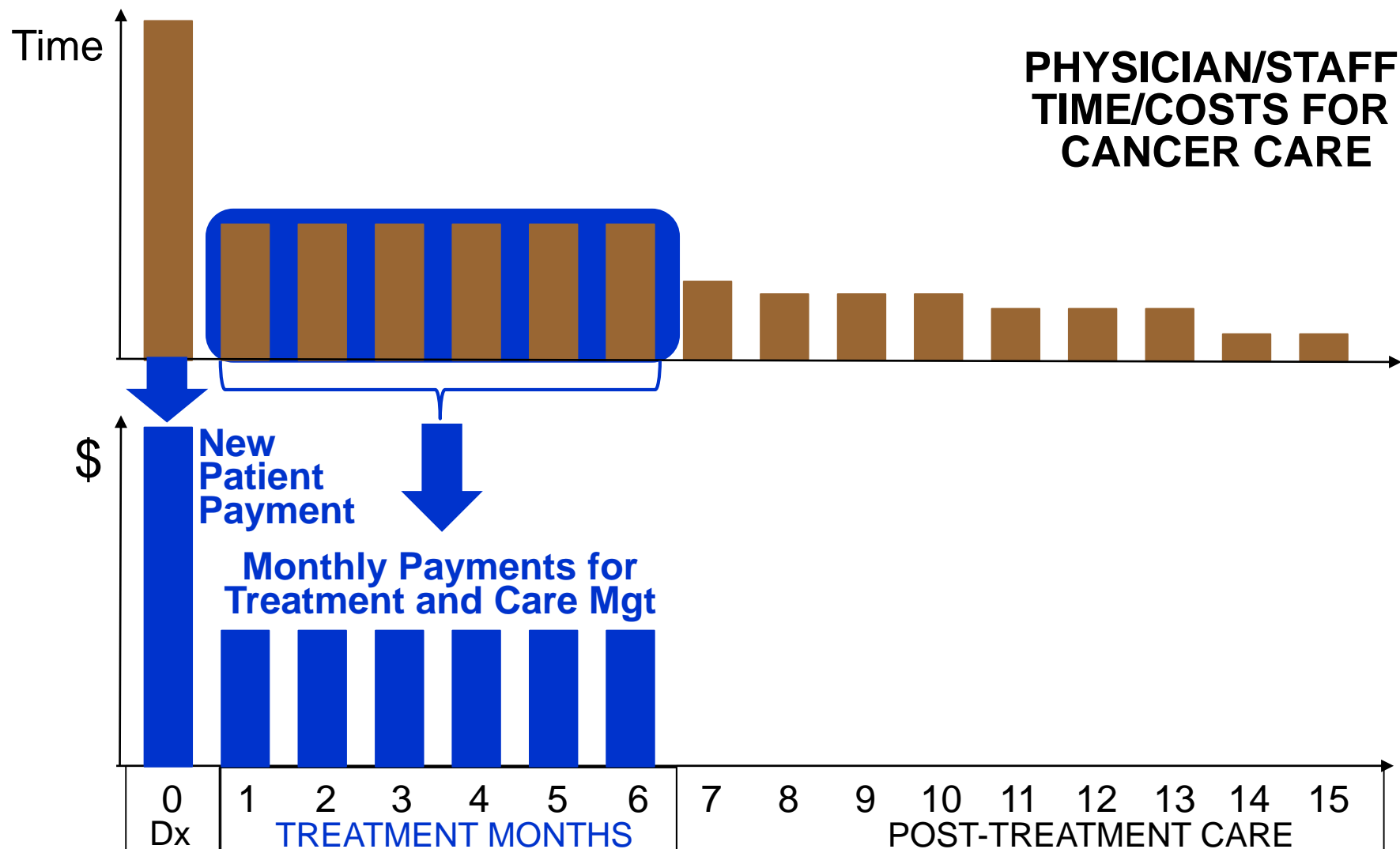
# A Lot Time is Spent Before Treatment Begins



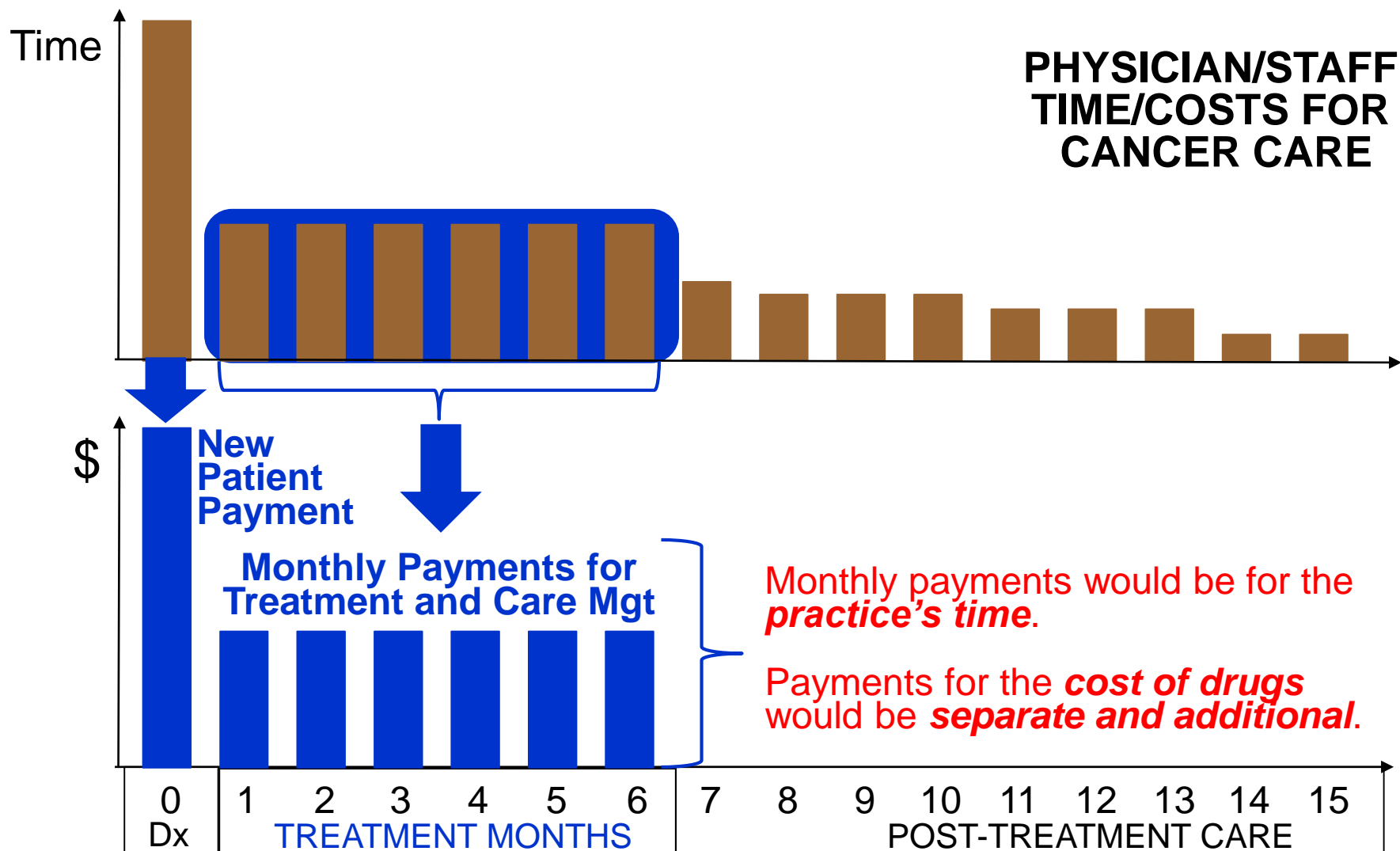
# Create a Large Payment for Diagnosis & Treatment Planning



# Create Monthly Payments for Treatment and Care Management

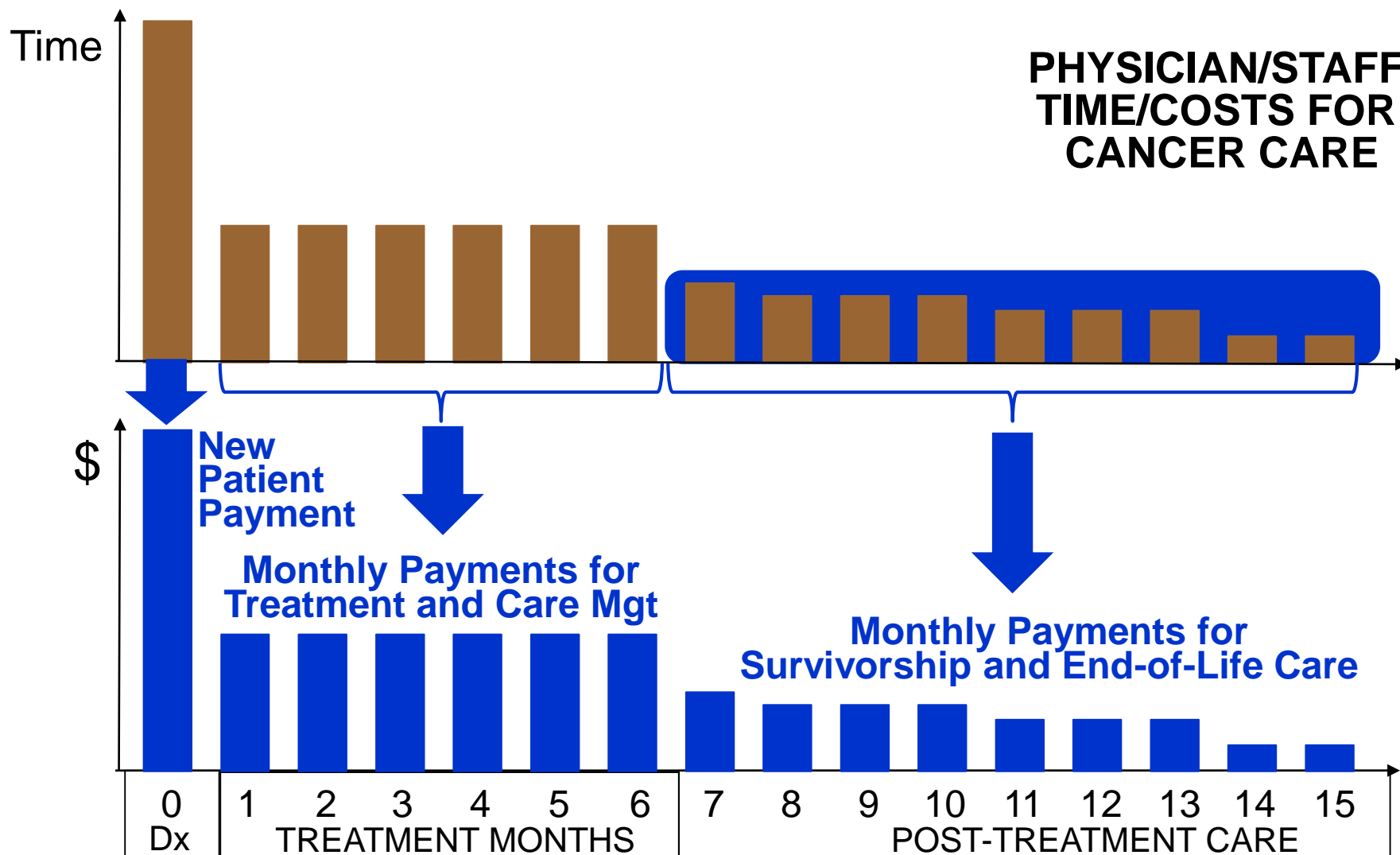


# Payments Are for *People & Time*; Costs of *Drugs* Would Be Separate

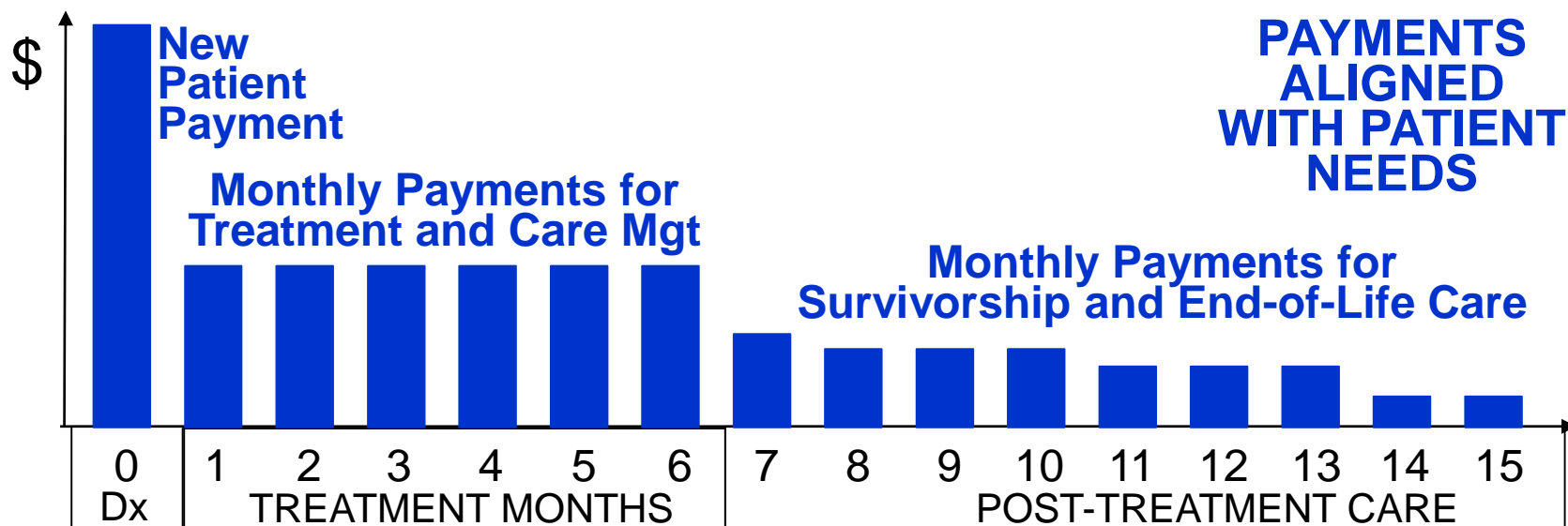
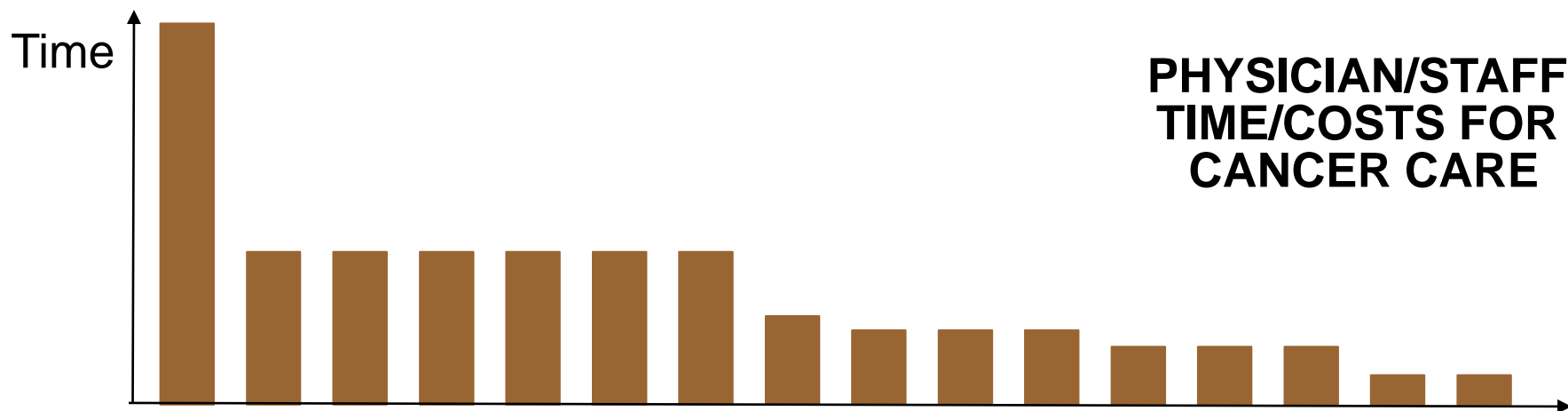




# Create Smaller Monthly Payments to Continue After Treatment Ends



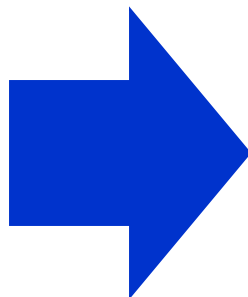
# Payments Aligned With Time/Cost of Services That Patients Need



# Payments Would Provide *Flexibility* As to *Who* Delivers Care & *How*

## CPT-Based FFS

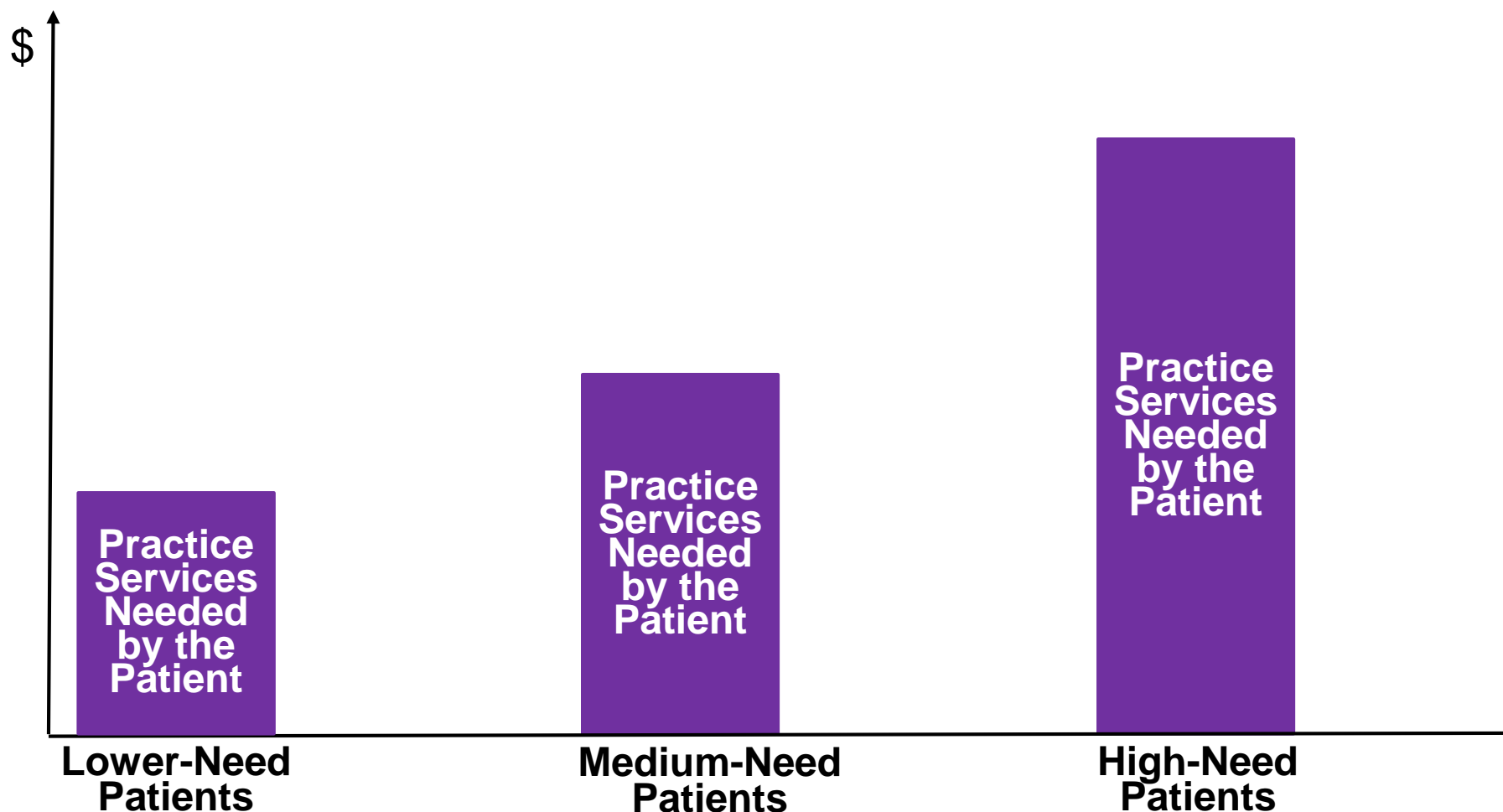
- Services delivered by physicians
- Face-to-face visits
- ~~Services delivered by nurses~~
- ~~Services delivered by pharmacists~~
- ~~Services delivered by counselors~~
- ~~Telephone and email support~~



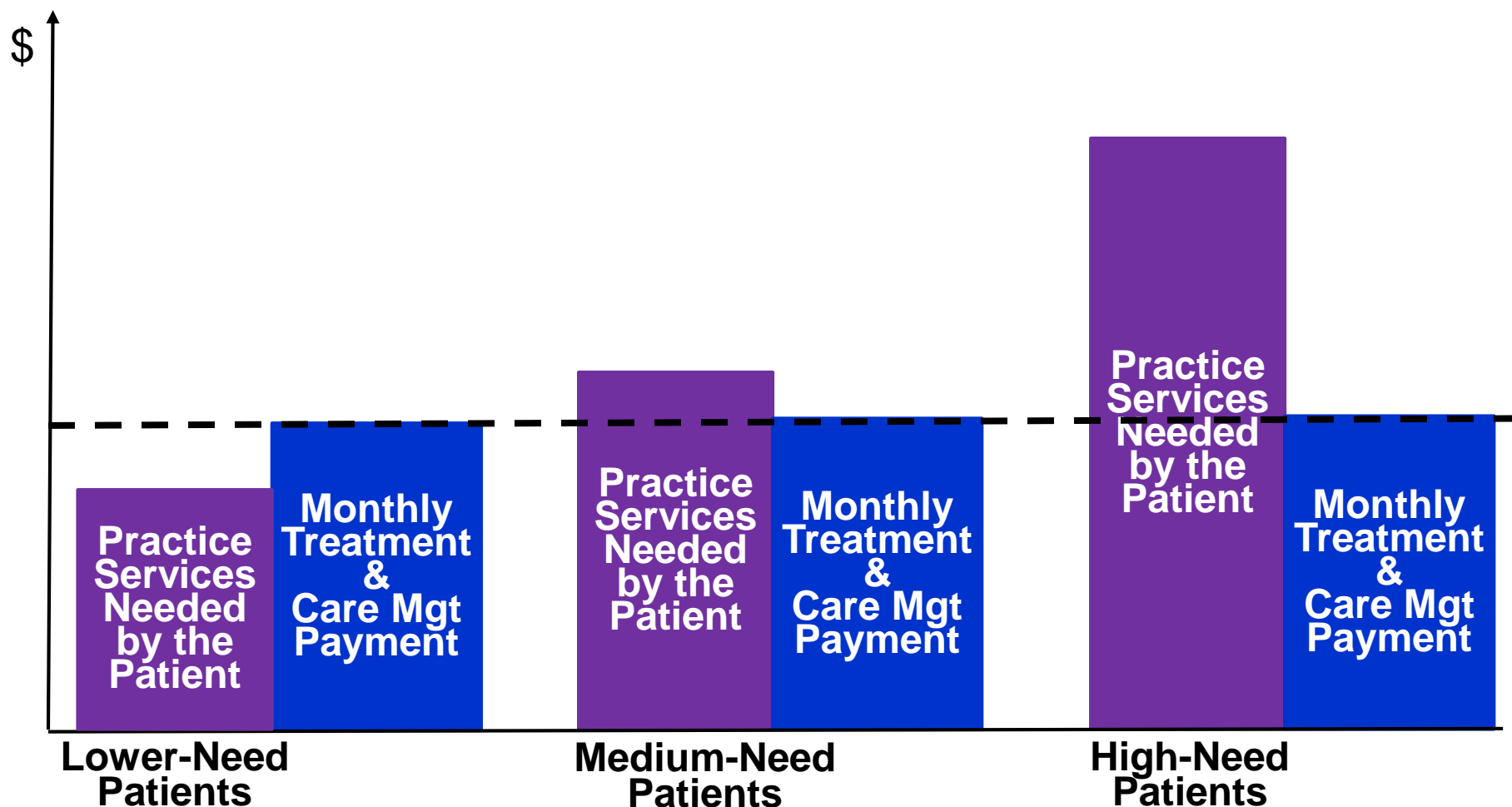
## Patient-Centered Payments

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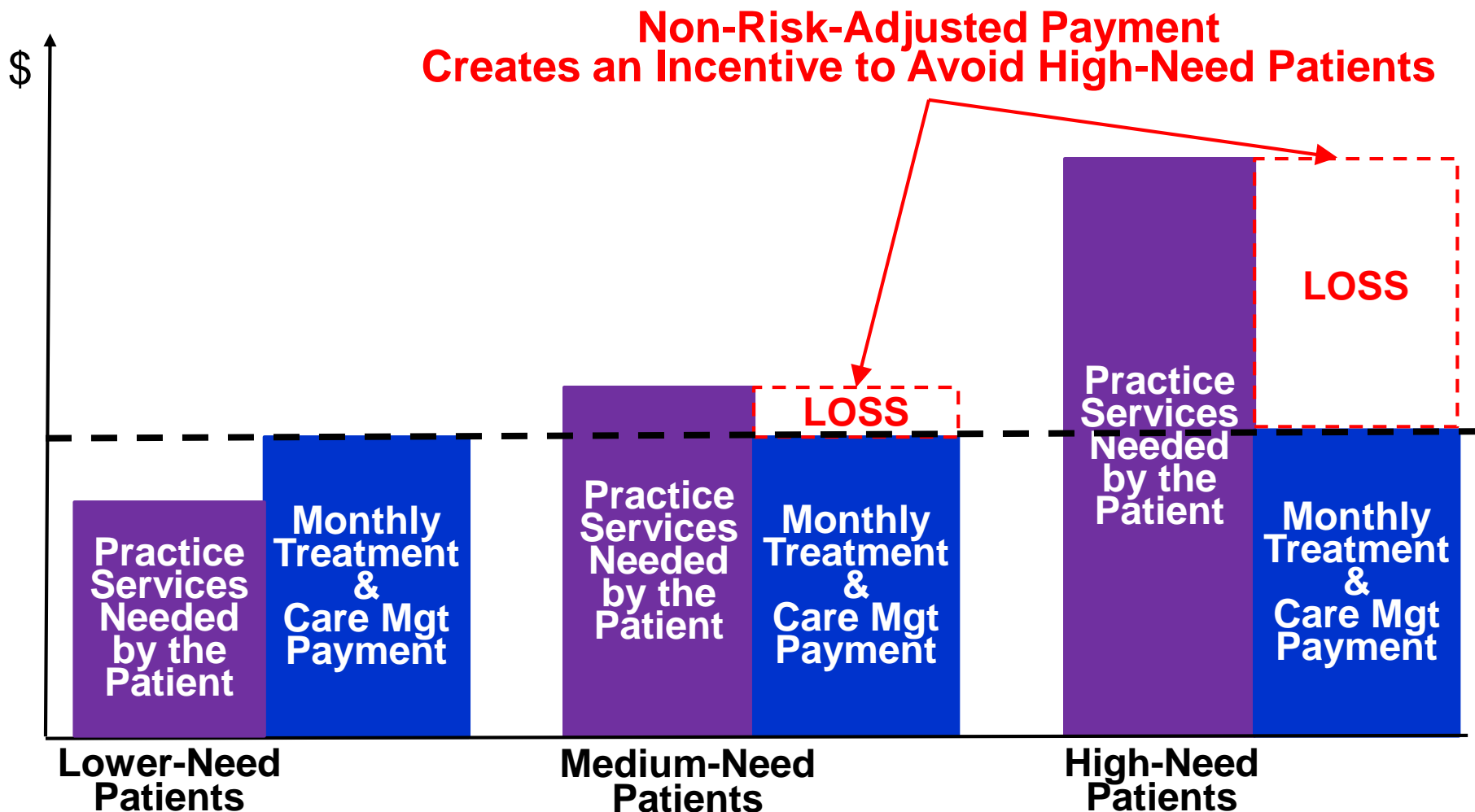
# Different Patients Have Different Needs in Each Phase of Care



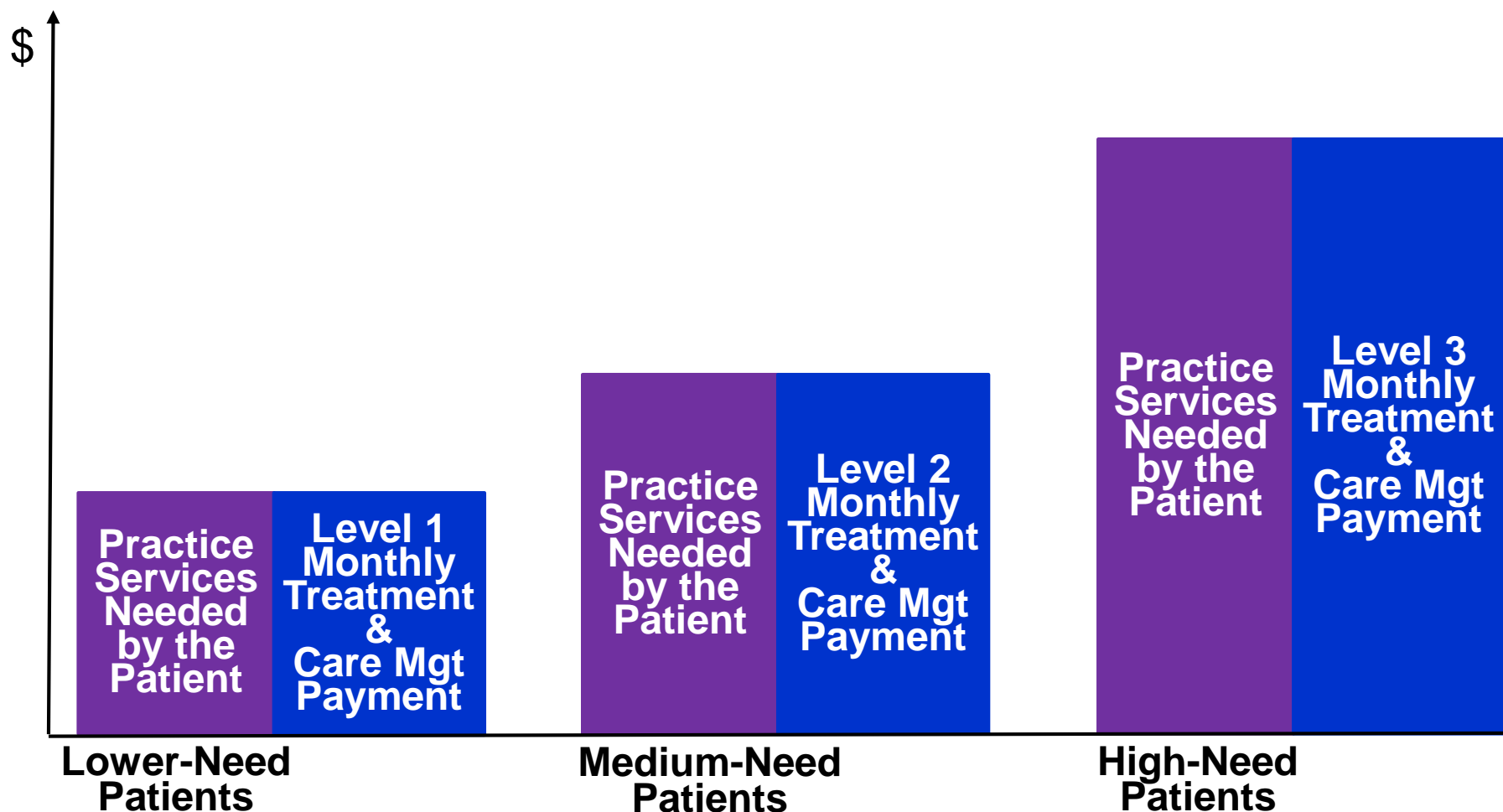
# The Monthly Payments Can't Be the Same For Every Patient



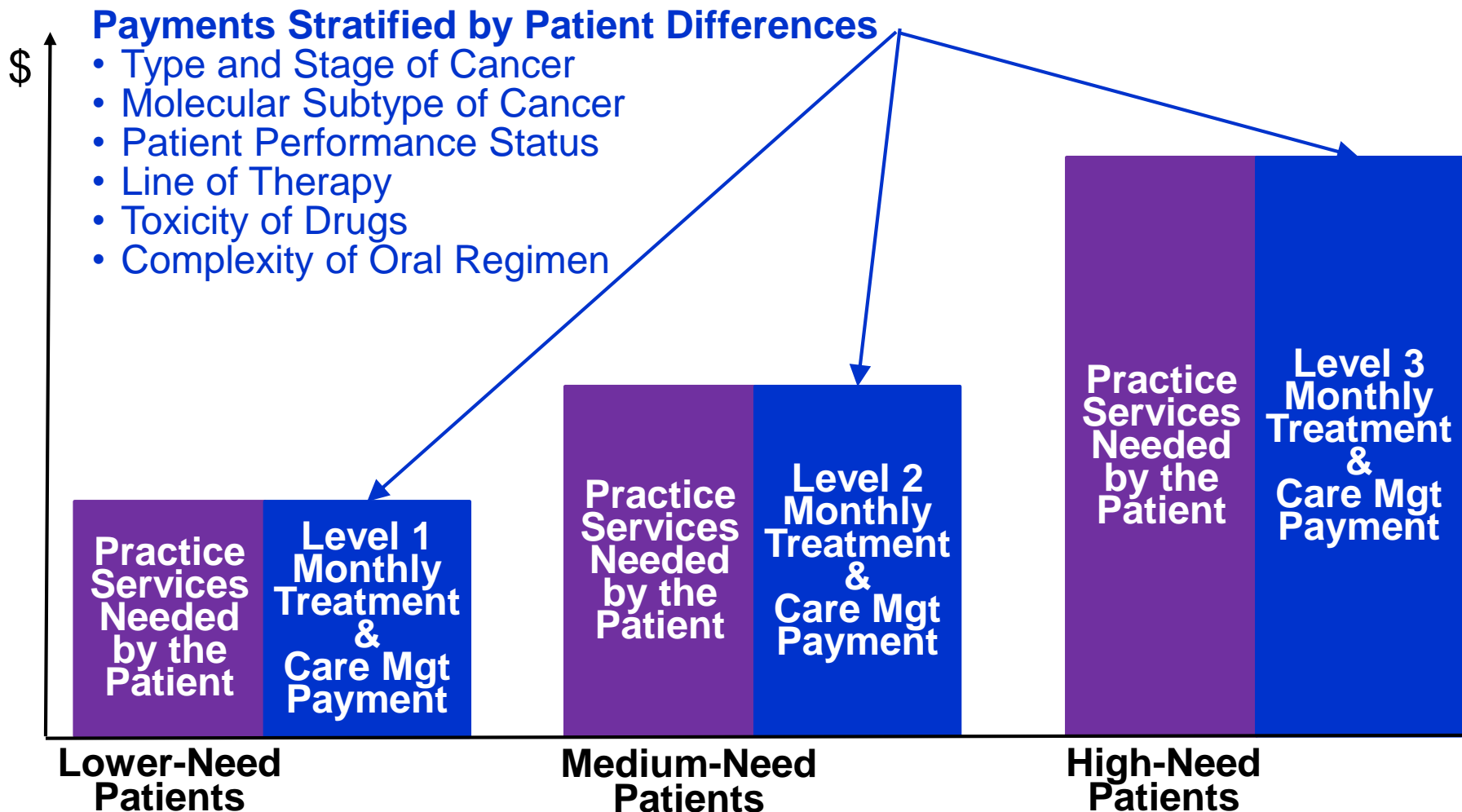
# The Monthly Payments Can't Be the Same For Every Patient



# Different Levels of Payment for Patients With Different Needs

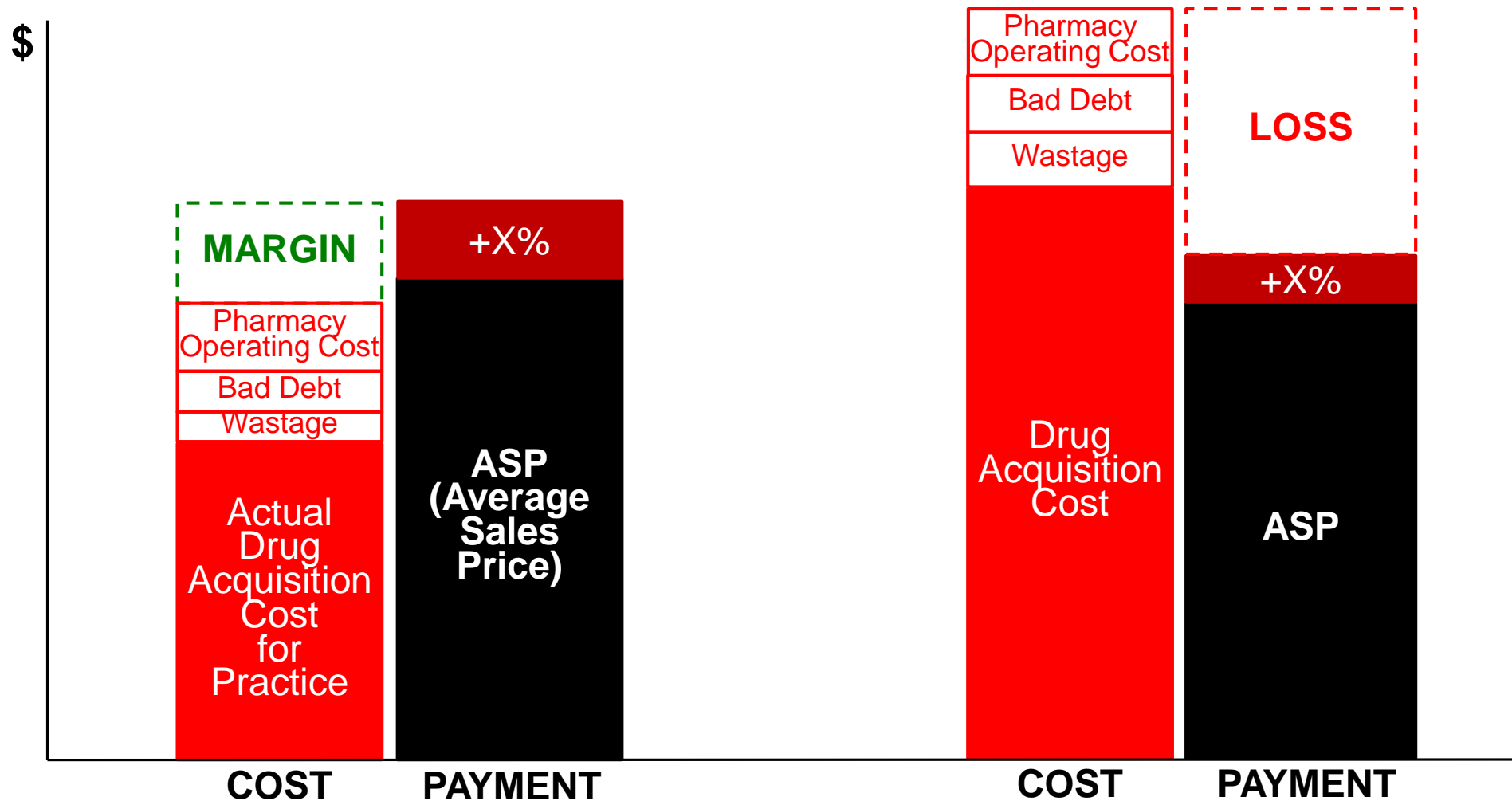


# Stratification of Payments Based on Differences in *Clinical Needs*



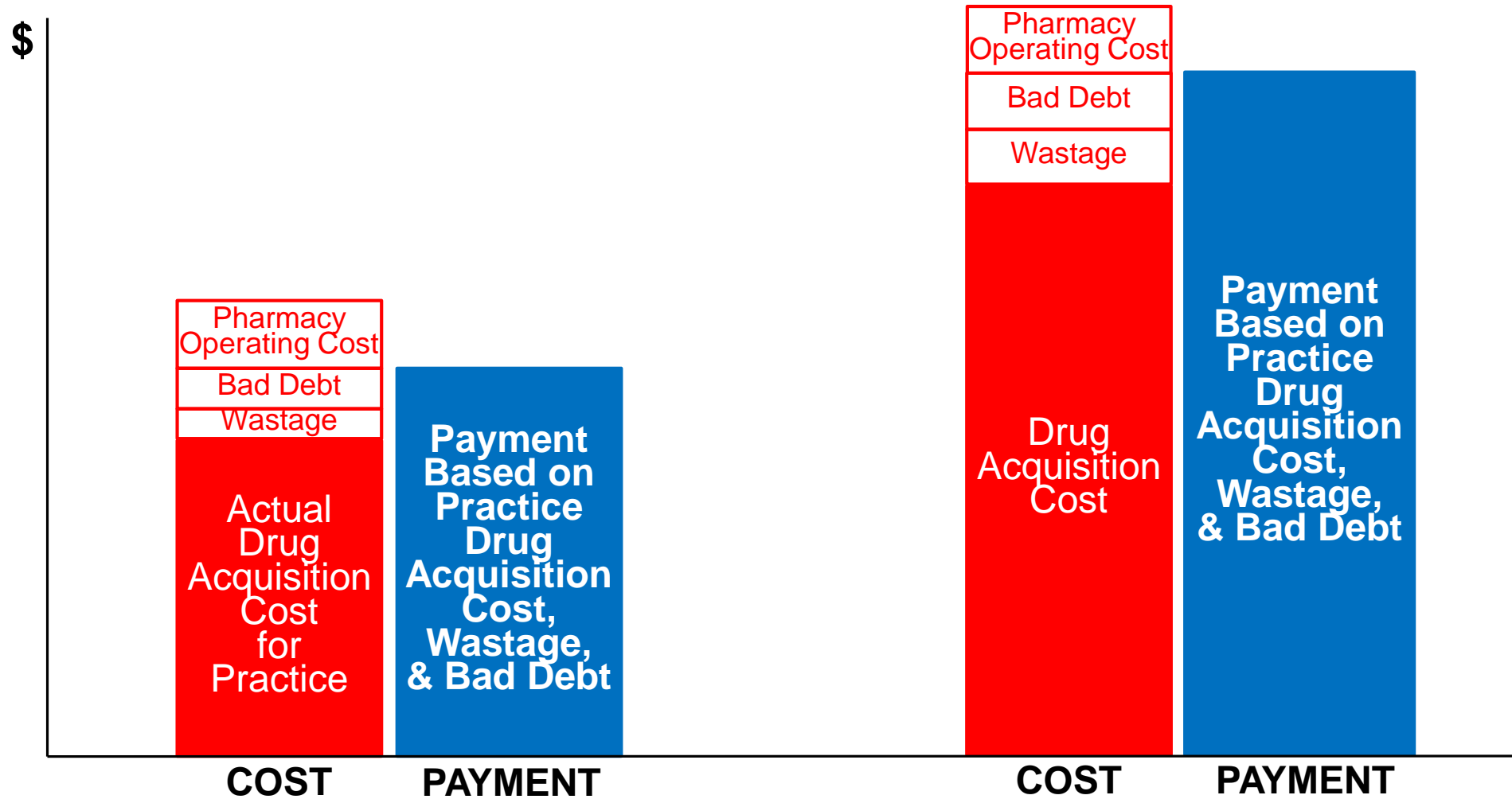


# Instead of ASP+x% That Allows Large Profits & Losses on Drugs



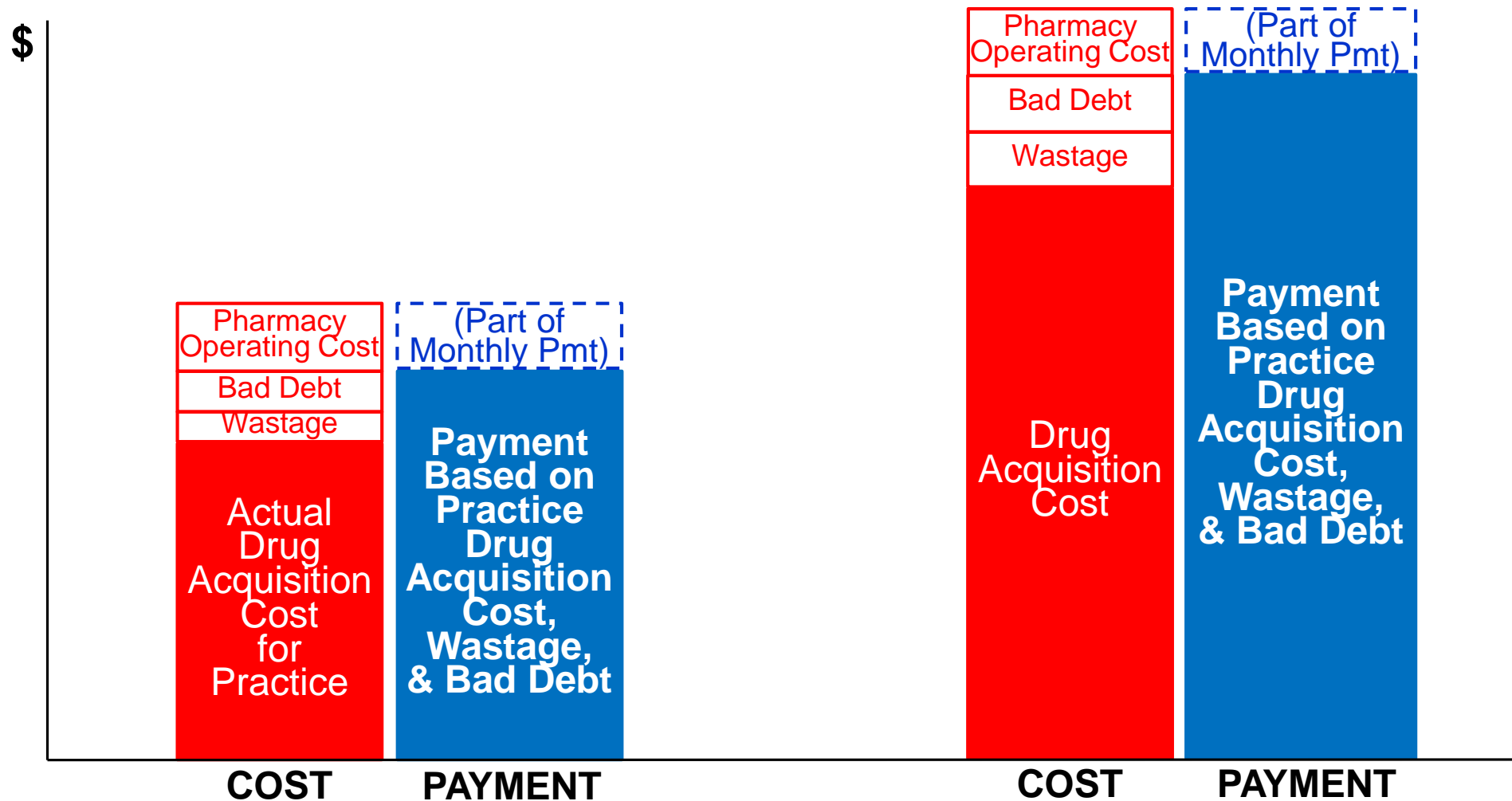
NOTE: Chart not drawn to scale

# Pay for Acquisition Costs of Drugs



**NOTE:** Chart not drawn to scale

# Pay for Acquisition Costs of Drugs + Pharmacy Operating Costs



NOTE: Chart not drawn to scale

# Instead of the Current Dysfunctional Payment System...

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- Identify and evaluate treatment options
- Identify clinical trial options
- Discuss treatment options with patient
- Develop plan of care
- Educate patient about treatment
- Provide genetic counseling
- Provide psychological counseling
- Provide nutrition counseling
- Provide financial counseling
- Determine insurance coverage and obtain pre-authorization
- Document information in records

### Treatment

- Prescribe drugs
- Order tests
- Evaluate patient progress
- Meet with patient to discuss progress
- Answer calls from patients
- Respond to complications
- Manage patients' pain
- Document information in records
- Keep detailed records for clinical trials
- Discuss end-of-life planning with patient

### Post-Treatment

- Develop a survivorship or end-of-life plan
- Order and review tests
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## Losses Covered by Margins on Drugs

# Flexible Payments Designed to Support Each Phase of Care

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## PATIENT-CENTERED PAYMENT

**New Patient Diagnosis and Treatment Planning Payment**

**Monthly Payment for Treatment and Care Mgt**

**Monthly Payment for Post-Treatment Survivorship Care**

**Monthly Payment for End-of-Life Support**

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## + Losses Covered by Margins on Drugs



# Payments Matching Time Patients Need, Not # of Services Provided

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99211 Established Patient Office Visit – Level 1	77334 Radiation treatment device design & construction
99212 Established Patient Office Visit – Level 2	77336 Radiation therapy consultation
99213 Established Patient Office Visit – Level 3	77338 Radiation therapy device design & construction
99214 Established Patient Office Visit – Level 4	77427 Radiation treatment management
99215 Established Patient Office Visit – Level 5	80048 Blood test, basic
99231 Subsequent Hospital Care – Level 1	80053 Blood test comprehensive
99232 Subsequent Hospital Care – Level 2	82378 CEA protein level
99233 Subsequent Hospital Care – Level 3	82607 Cyanocobalamin level
96360 Intravenous infusion, hydration	82728 Ferritin level
96361 Intravenous infusion, hydration	82784 Gammaglobulin measurement
96365 Intravenous infusion, non-chemotherapy	83540 Iron level
96366 Intravenous infusion, non-chemotherapy	83550 Iron binding capacity
96367 Intravenous infusion, non-chemotherapy	83615 Lactate dehydrogenase level
96372 Injection, non-chemotherapy	83735 Magnesium level
96375 Intravenous push, non-chemotherapy	84100 Phosphate level
96401 Subcutaneous chemotherapy administration	84443 Thyroid stimulating hormone level
96402 Subcutaneous chemotherapy administration	84550 Uric acid level
96411 Push chemotherapy administration	85007 White blood cell count
96413 Infusion chemotherapy administration	85025 Complete blood cell count
96415 Infusion chemotherapy administration	85027 Complete blood cell count
96417 Infusion chemotherapy administration	85610 Blood clotting time
96523 Irrigation of venous access device	86300 Immunologic analysis for tumor antigen
36415 Insertion of needle to collect blood sample	88185 Flow cytometry
77014 CT scan guidance for radiation	G6002 Stereoscopic x-ray guidance for radiation
77263 Management of radiation therapy	G6102 Radiation treatment delivery
77280 Management of radiation therapy simulation	G6013 Radiation treatment delivery
77290 Management of radiation therapy simulation	G6015 Intensity modulated treatment delivery
77295 Management of radiation therapy 3D	

**+**

## Dozens of Unpaid Services

- Diagnosis and Treatment Planning**
- Review tests & pathology reports
  - Determine type and stage of cancer
  - Identify and evaluate treatment options
  - Identify clinical trial options
  - Discuss treatment options with patient
  - Develop plan of care
  - Educate patient about treatment
  - Provide genetic counseling
  - Provide psychological counseling
  - Provide nutrition counseling
  - Provide financial counseling
  - Determine insurance coverage and obtain pre-authorization
  - Document information in records

- Treatment**
- Prescribe drugs
  - Order tests
  - Evaluate patient progress
  - Meet with patient to discuss progress
  - Answer calls from patients
  - Respond to complications
  - Manage patients' pain
  - Document information in records
  - Keep detailed records for clinical trials
  - Discuss end-of-life planning with patient

- Post-Treatment**
- Develop a survivorship or end-of-life plan
  - Order and review tests
  - See patient to address needs
  - Answer calls from patients
  - Respond to post-treatment complications
  - Manage patients' pain
  - Document information in records
  - Keep detailed records for clinical trials

**+**

## Losses Covered by Margins on Drugs

## PATIENT-CENTERED PAYMENT

**New Patient Diagnosis and Treatment Planning Payment**  
 Level 1: Low Need/Complexity  
 Level 2: High Need/Complexity

**Monthly Payment for Treatment and Care Mgt**  
 Level 1: Low Need/Complexity  
 Level 2: Medium Need/Complexity  
 Level 3: High Need/Complexity

**Monthly Payment for Post-Treatment Survivorship Care**  
 Level 1: Low Need/Complexity  
 Level 2: High Need/Complexity

**Monthly Payment for End-of-Life Support**  
 Level 1: Low Need/Complexity  
 Level 2: High Need/Complexity

**Payment for Drug Acquisition Cost**

# Patient-Centered Payment is a *Better* Fee for Service System

**This is still  
“fee for service,”  
but the fees are based on  
cancer patients’ needs and  
oncology practice costs,  
not on how many  
individual services  
are delivered.**

## **PATIENT-CENTERED PAYMENT**

**New Patient Diagnosis and  
Treatment Planning Payment**  
Level 1: Low Need/Complexity  
Level 2: High Need/Complexity

**Monthly Payment for  
Treatment and Care Mgt**  
Level 1: Low Need/Complexity  
Level 2: Medium Need/Complexity  
Level 3: High Need/Complexity

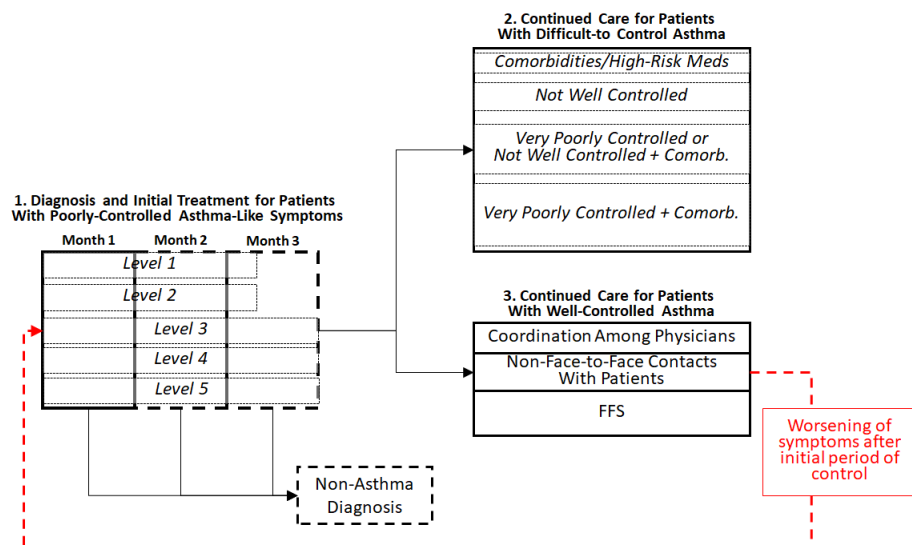
**Monthly Payment for  
Post-Treatment Survivorship Care**  
Level 1: Low Need/Complexity  
Level 2: High Need/Complexity

**Monthly Payment for  
End-of-Life Support**  
Level 1: Low Need/Complexity  
Level 2: High Need/Complexity

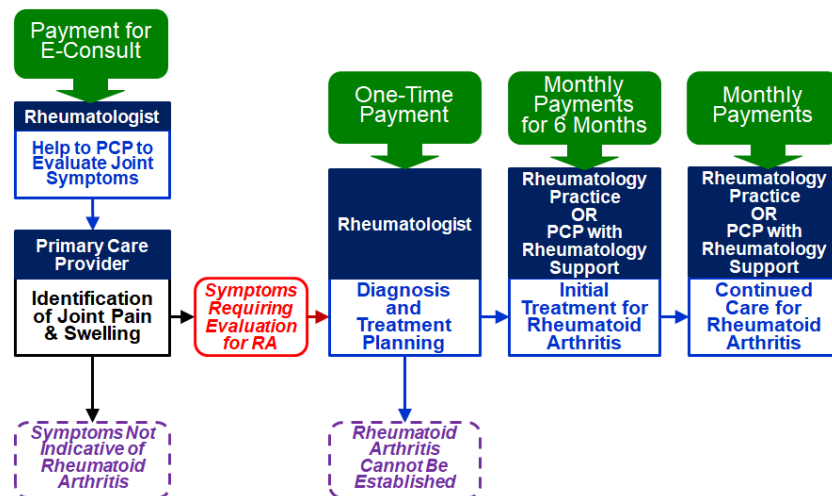
**Payment for Drug Acquisition Cost**

# Other Specialties Are Developing Similar APMs for Other Conditions

## “Patient-Centered Asthma Care Payment” (American College of Allergy, Asthma, and Immunology)

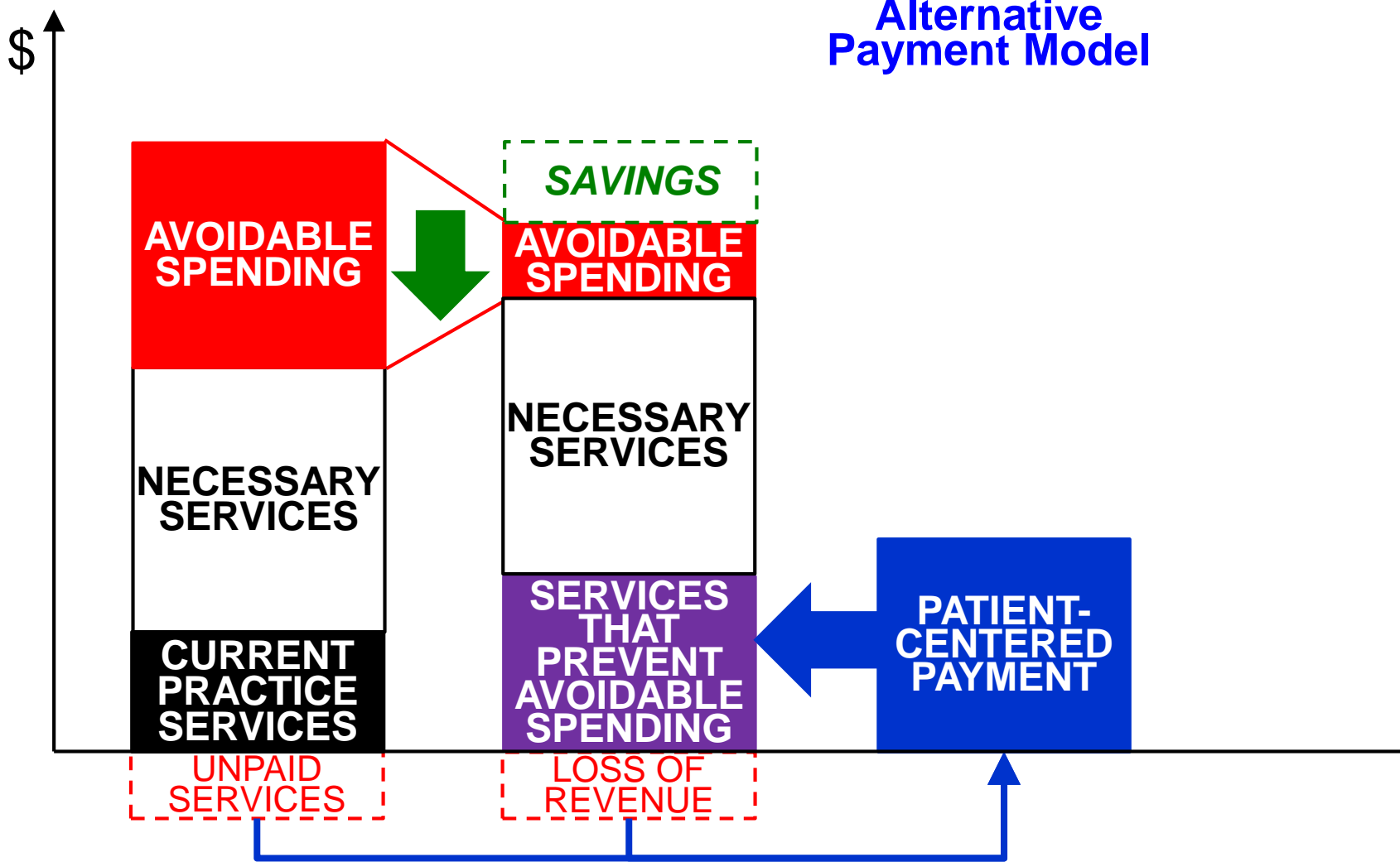


## (Draft) Alternative Payment Model for Rheumatoid Arthritis Care (American College of Rheumatology)



# If Payers Pay Differently for Oncology Services...

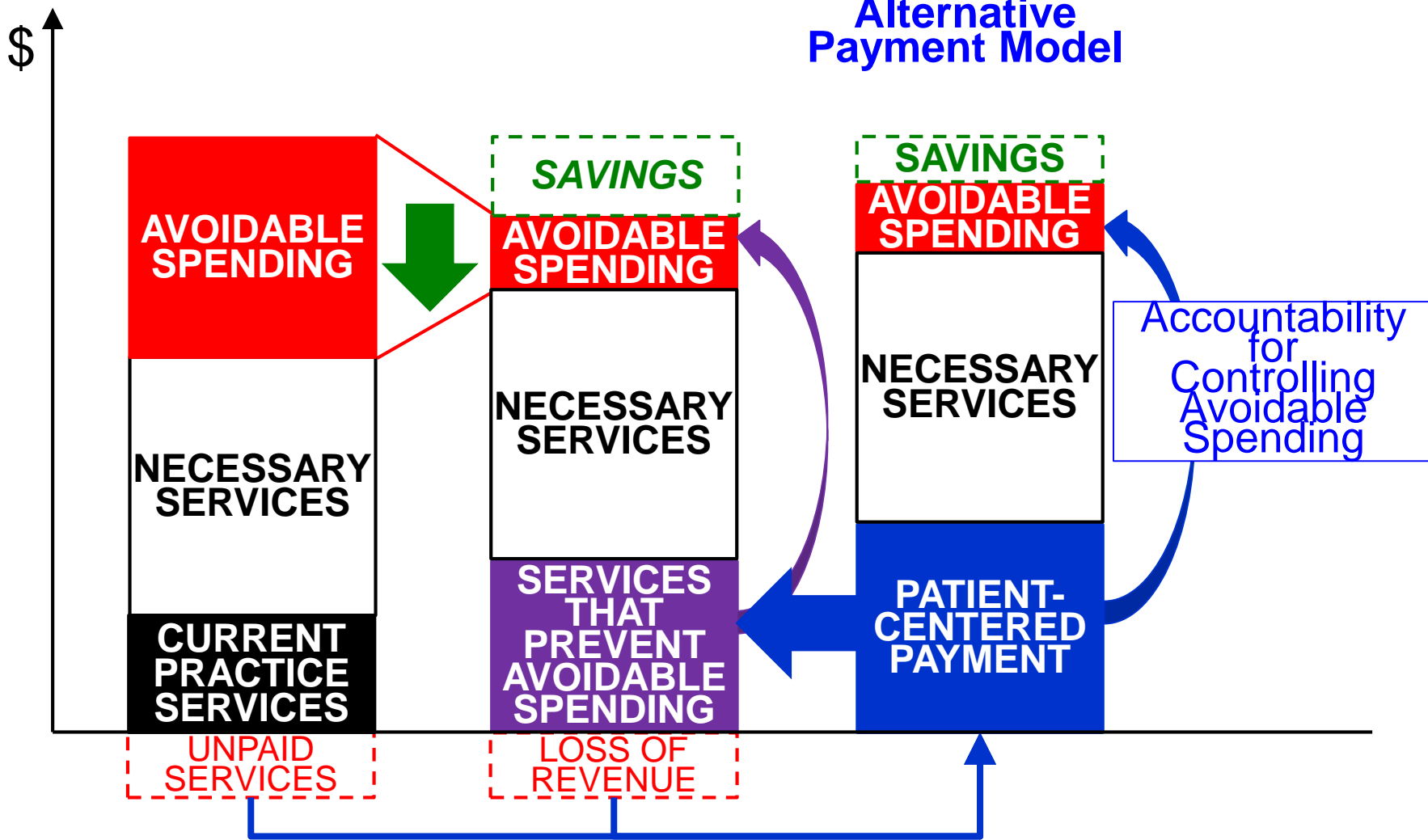
## Alternative Payment Model



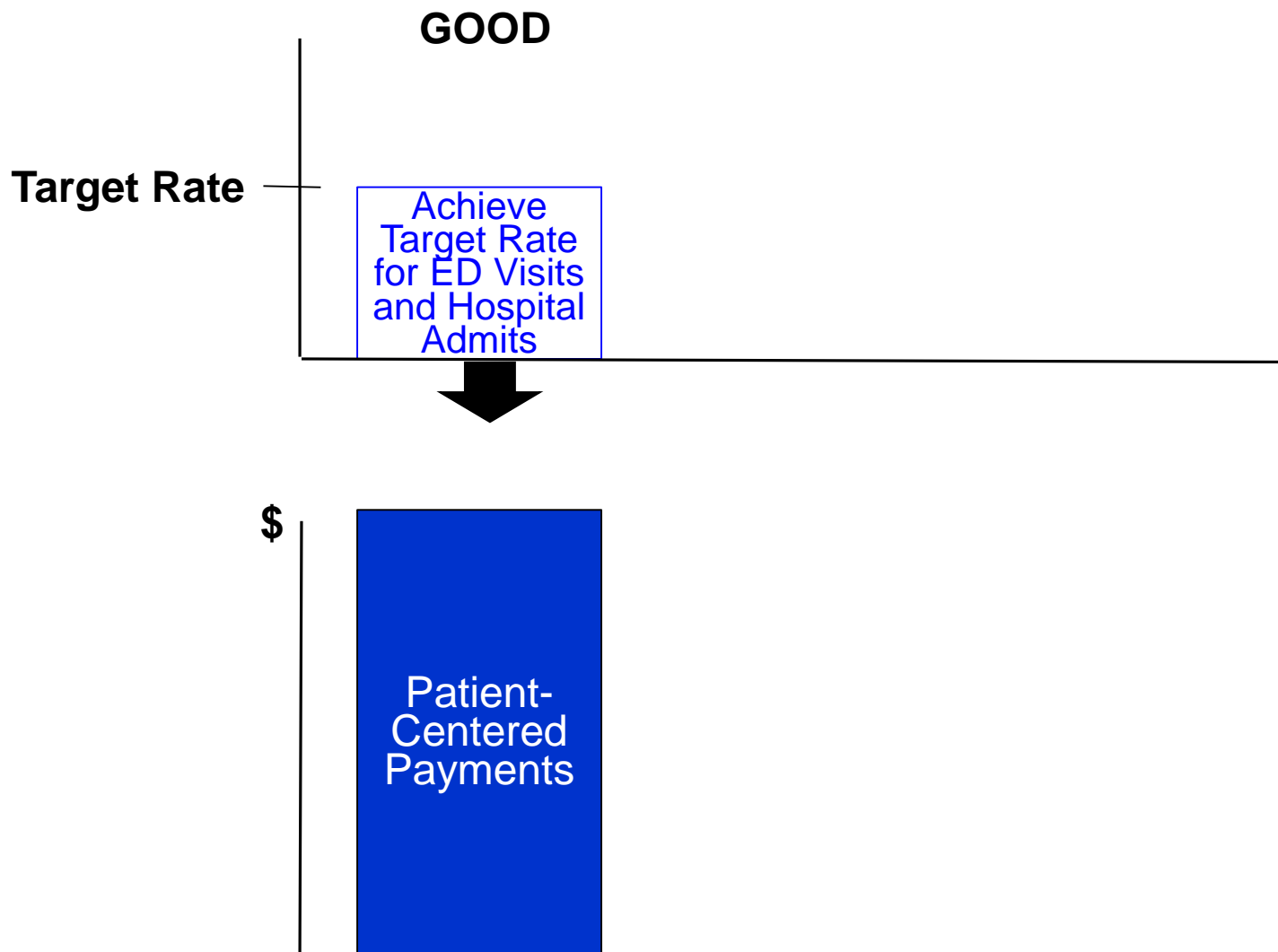


# Step 4: Require Accountability for Cost & Quality *Providers Can Control*

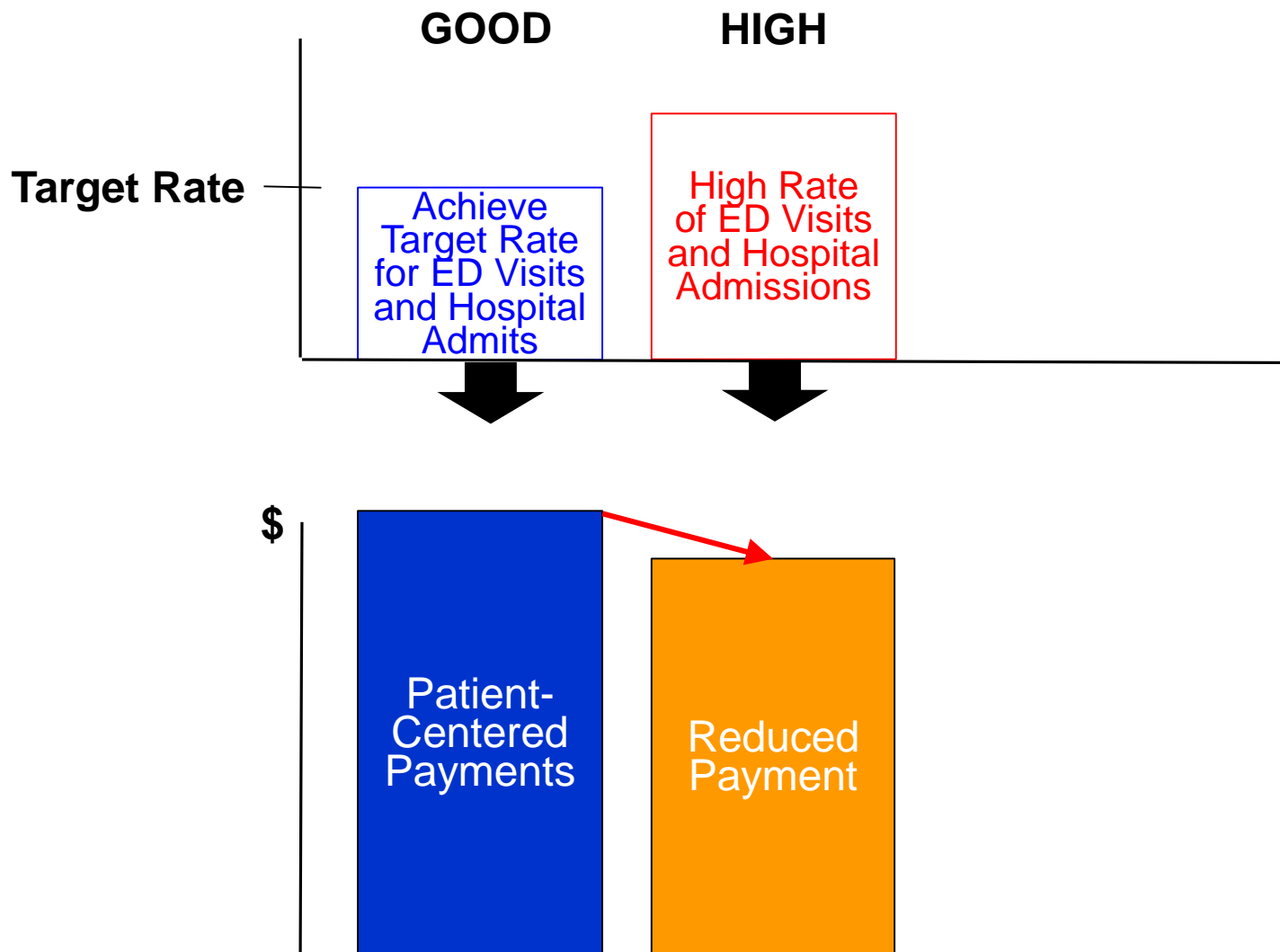
## Alternative Payment Model



# #1: Set a Goal/Target Rate for ED Visits and Hospital Admits

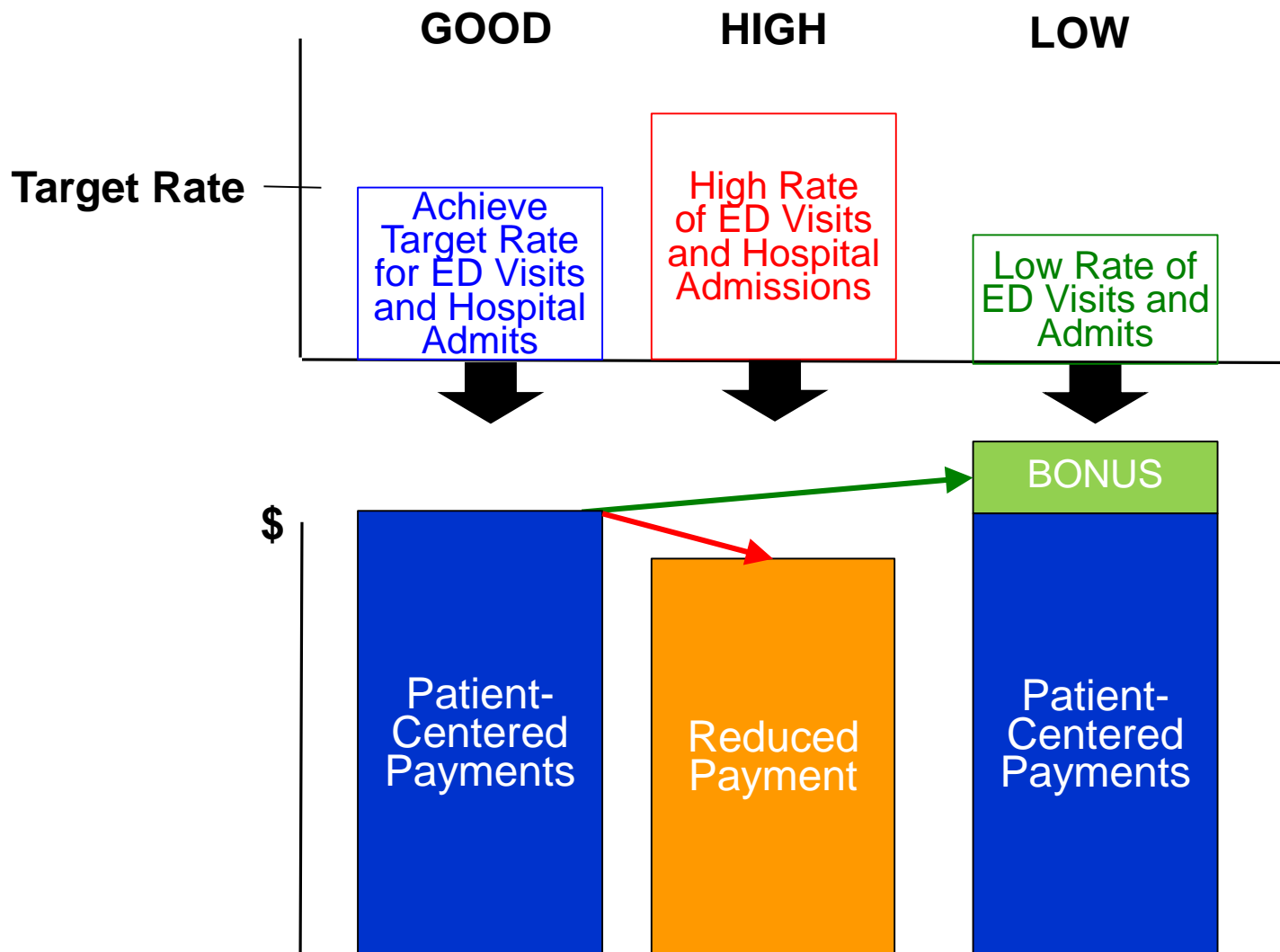


# Reduce Payments If Rate of Admits Is Worse Than Target

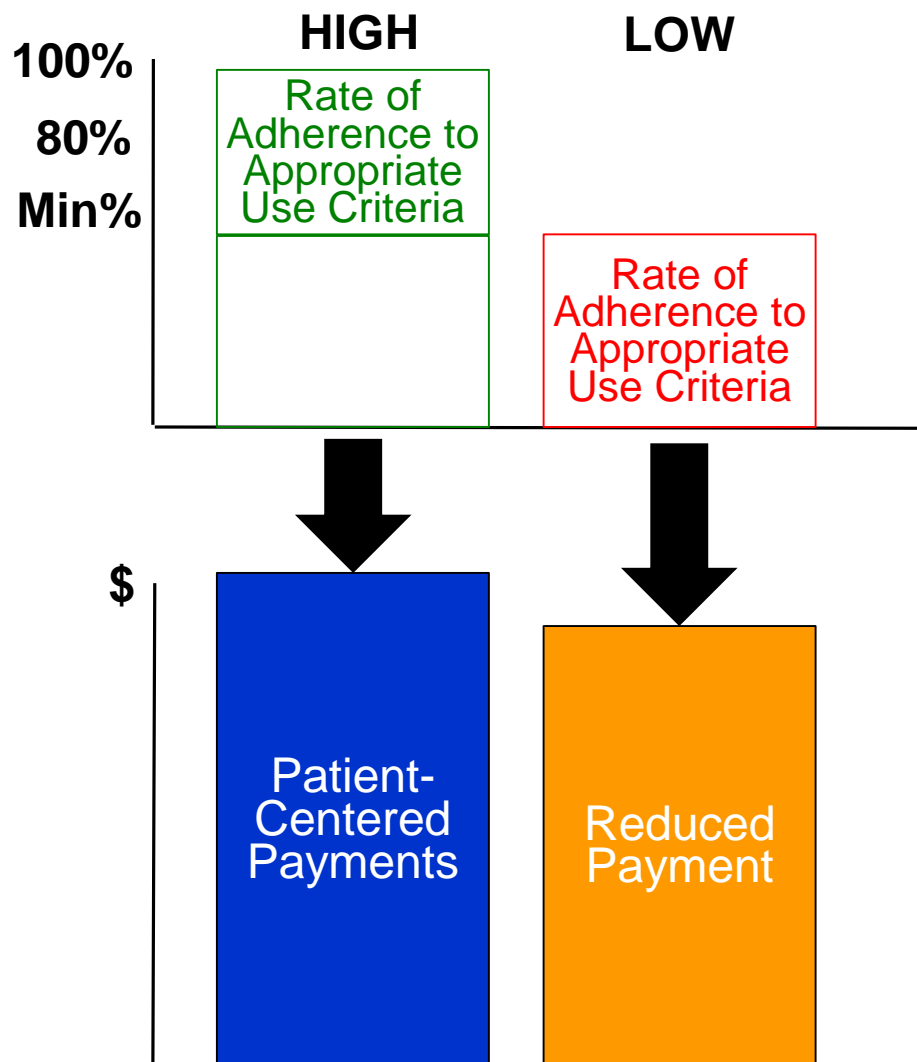




# Bonus Payment If ED/Hospital Use Is Better Than Goal/Target



# #2: Reduce Payment If Oncologist Does Not Follow Guidelines



American Society for Radiation Oncology

**Five Things Physicians and Patients Should Question**

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American Society of Clinical Oncology

**Five Things Physicians and Patients Should Question**

The American Society of Clinical Oncology (ASCO) is a medical professional oncology society committed to conquering cancer through research, education, prevention, and delivery of high-quality patient care. ASCO recognizes the importance of evidence-based cancer care and making wise choices in the diagnosis and management of patients with cancer. After careful consideration by experienced oncologists, ASCO highlights five categories of tests, procedures and/or treatments whose common use and clinical value are not supported by available evidence. These test and treatment options should not be administered unless the physician and patient have carefully considered if their use is appropriate in the individual case. As an example, when a patient is enrolled in a clinical trial, these tests, treatments, and procedures may be part of the trial protocol and therefore deemed necessary for the patient's participation in the trial.

- 1 **Don't use cancer-directed therapy for solid tumor patients with the following characteristics: low performance status (3 or 4), no benefit from prior evidence-based interventions, not eligible for a clinical trial, and no strong evidence supporting the clinical value of further anti-cancer treatment.**
  - Studies show that cancer directed treatments are likely to be ineffective for solid tumor patients who meet the above stated criteria.
  - Exceptions include patients with functional limitations due to other conditions resulting in a low performance status or those with disease characteristics (e.g., mutations) that suggest a high likelihood of response to therapy.
  - Implementation of this approach should be accompanied with appropriate palliative and supportive care.
- 2 **Don't perform PET, CT, and radionuclide bone scans in the staging of early prostate cancer at low risk for metastasis.**
  - Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
  - Evidence does not support the use of these scans for staging of newly diagnosed low grade carcinoma of the prostate (Stage 1c/12a, prostate-specific antigen (PSA) <10 ng/ml, Gleason score less than or equal to 6) with low risk of distant metastasis.
  - Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.
- 3 **Don't perform PET, CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis.**
  - Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
  - In breast cancer, for example, there is a lack of evidence demonstrating a benefit for the use of PET, CT, or radionuclide bone scans in asymptomatic individuals with newly identified ductal carcinoma in situ (DCIS), or clinical stage I or II disease.
  - Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.
- 4 **Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.**
  - Surveillance testing with serum tumor markers or imaging has been shown to have clinical value for certain cancers (e.g., colorectal). However for breast cancer that has been treated with curative intent, several studies have shown there is no benefit from routine imaging or serial measurement of serum tumor markers in asymptomatic patients.
  - False-positive tests can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.
- 5 **Don't use white cell stimulating factors for primary prevention of febrile neutropenia for patients with less than 20 percent risk for this complication.**
  - ASCO guidelines recommend using white cell stimulating factors when the risk of febrile neutropenia, secondary to a recommended chemotherapy regimen, is approximately 20 percent and equally effective treatment programs that do not require white cell stimulating factors are unavailable.
  - Exceptions should be made when using regimens that have a lower chance of causing febrile neutropenia if it is determined that the patient is at high risk for this complication (due to age, medical history, or disease characteristics).

# Instead of Multiple Pathways and Pre-Authorization Requirements...

## TODAY

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Prior  
Authorization  
Requirements**

**Payer-Specific  
Prior  
Authorization  
Requirements**

# Oncologists Should Take Control of Appropriateness Decisions

**TODAY**

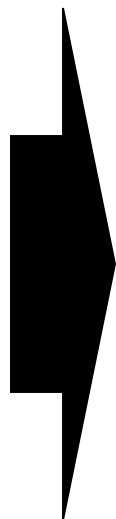
**PATIENT-CENTERED  
PAYMENT**

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Prior  
Authorization  
Requirements**

**Payer-Specific  
Prior  
Authorization  
Requirements**



**Oncology  
Practice  
Accountable  
for  
Following  
Choosing  
Wisely  
and NCCN  
Guidelines**

# Instead of Delaying Treatment Waiting for Approval of Services...

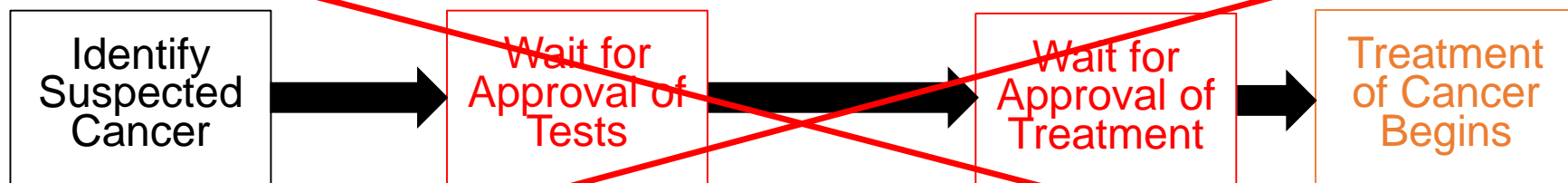
## PAYER-CONTROLLED PROCESS FOR INITIATING CANCER TREATMENT



*Delay in treatment, progression of disease, worse outcomes*

# ...Physician Accountability Enables Faster Treatment at Lower Cost

## ~~PAYER-CONTROLLED PROCESS FOR INITIATING CANCER TREATMENT~~



*Delay in treatment, progression of disease, worse outcomes*

## PROCESS WITH PHYSICIAN ACCOUNTABILITY FOR APPROPRIATE USE



*Rapid treatment, better outcomes*

# Oncologists Will Need to Define and Maintain Clinical Pathways

**TODAY**

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Proprietary  
Pathway**

**Payer-Specific  
Prior  
Authorization  
Requirements**

**Payer-Specific  
Prior  
Authorization  
Requirements**

**PATIENT-CENTERED  
PAYMENT  
IMMEDIATE**

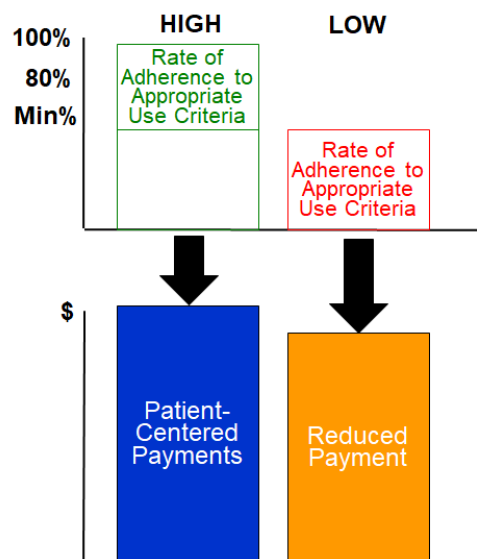
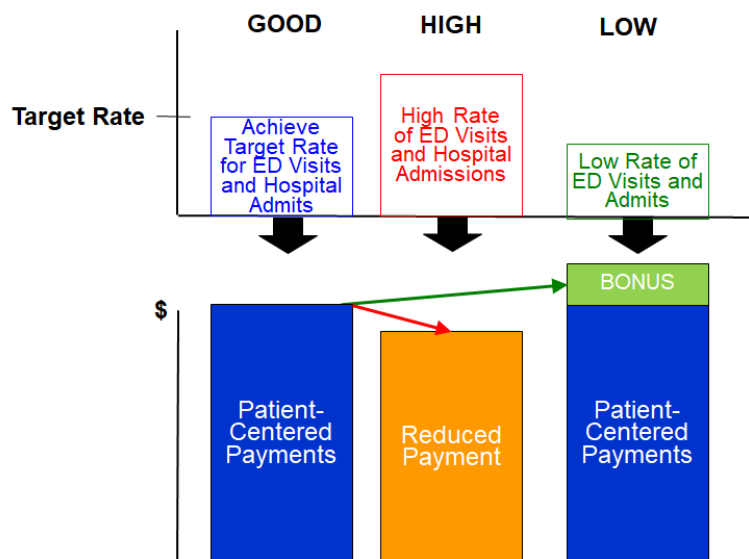
**Oncology  
Practice  
Accountable  
for  
Following  
Choosing  
Wisely  
and NCCN  
Guidelines**

**PATIENT-CENTERED  
PAYMENT  
FUTURE**

**Oncology  
Practice  
Accountable  
for  
Following  
Clinical  
Pathways  
Developed  
& Maintained  
by *Oncologists***

# Payment is Tied to *Appropriate* Use & Outcomes, Not *Savings* or *Risk*

- Practices that are *already* performing efficiently and effectively receive payments that allow them to *maintain* that performance and *reduce their dependence on drug margins*
- Practices that are *not performing efficiently and effectively* have to improve performance in order to receive the payments – and they *achieve savings for purchasers* in the process



**Choosing Wisely**  
An initiative of the ABIM Foundation

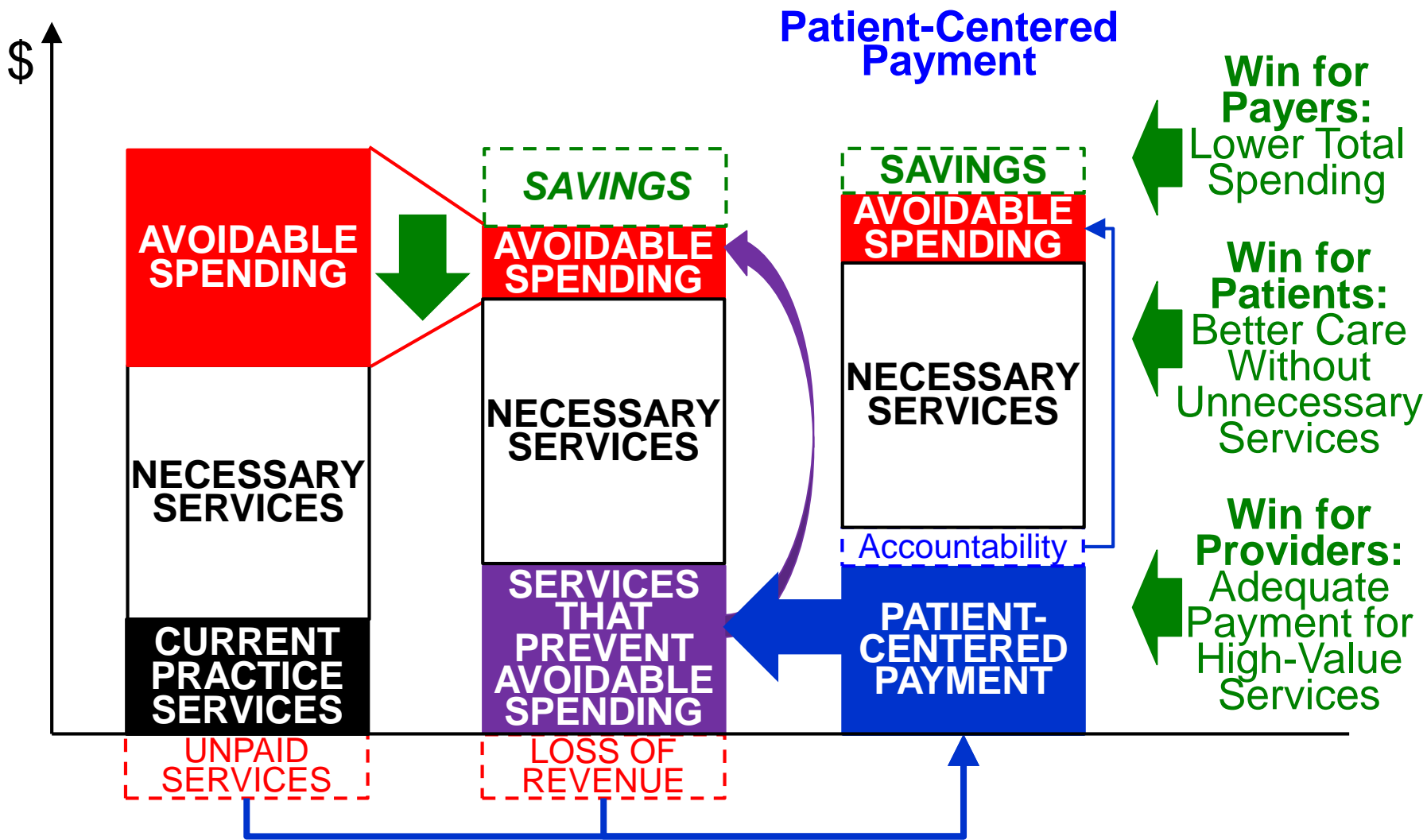
American Society of Radiation Oncology (ASTRO)  
Five Things Physicians and Patients Should Question

American Society of Clinical Oncology (ASCO)  
Five Things Physicians and Patients Should Question

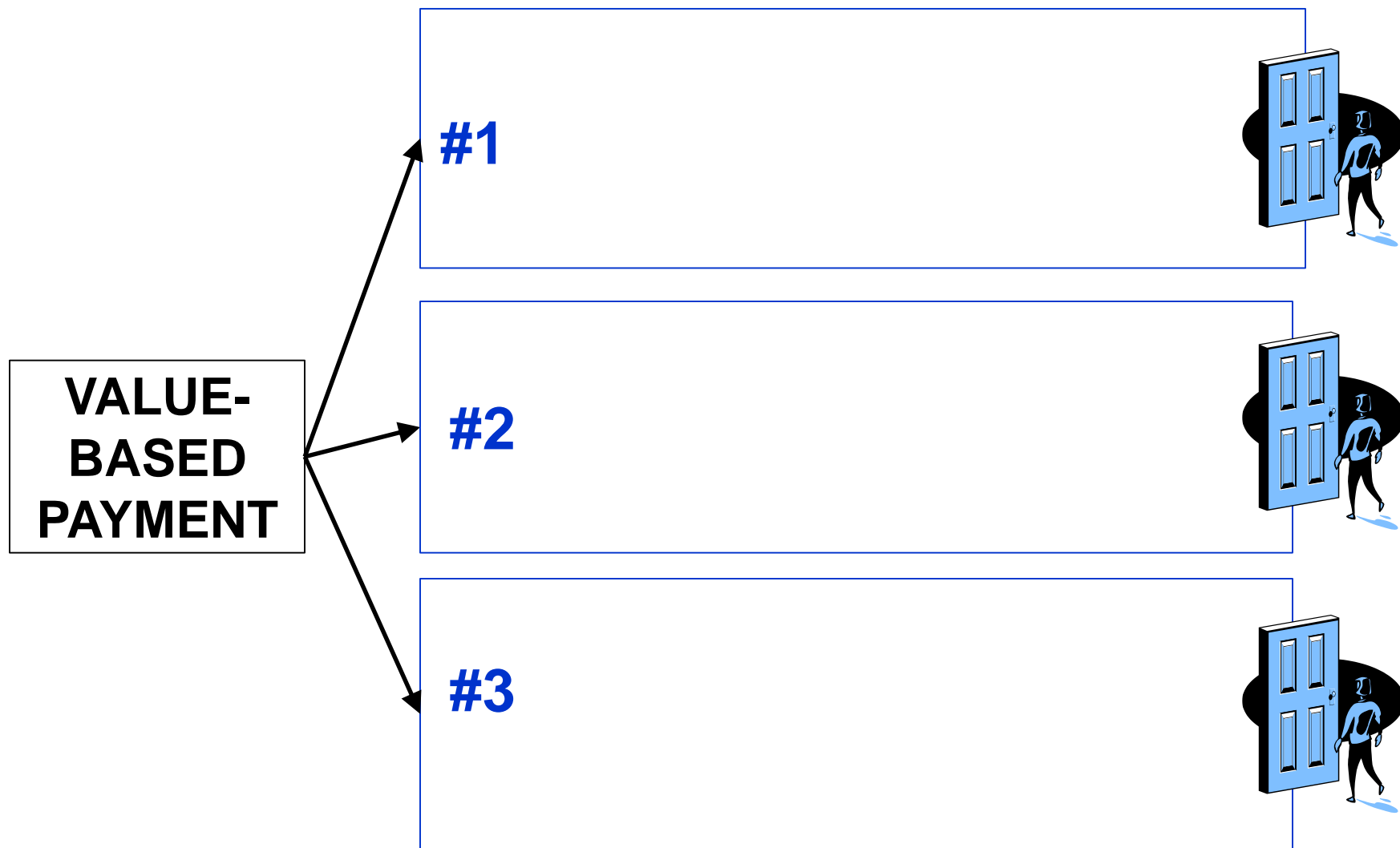
- Don't use cancer-directed therapy for solid tumor patients with the following characteristics: low performance status (2 or 4), no benefit from prior evidence-based interventions, not eligible for a clinical trial, and no strong evidence supporting the clinical value of further anti-cancer treatment.
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- Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.
- Don't use white cell stimulating factors for primary prevention of febrile neutropenia for patients with less than 20 percent risk for this complication.



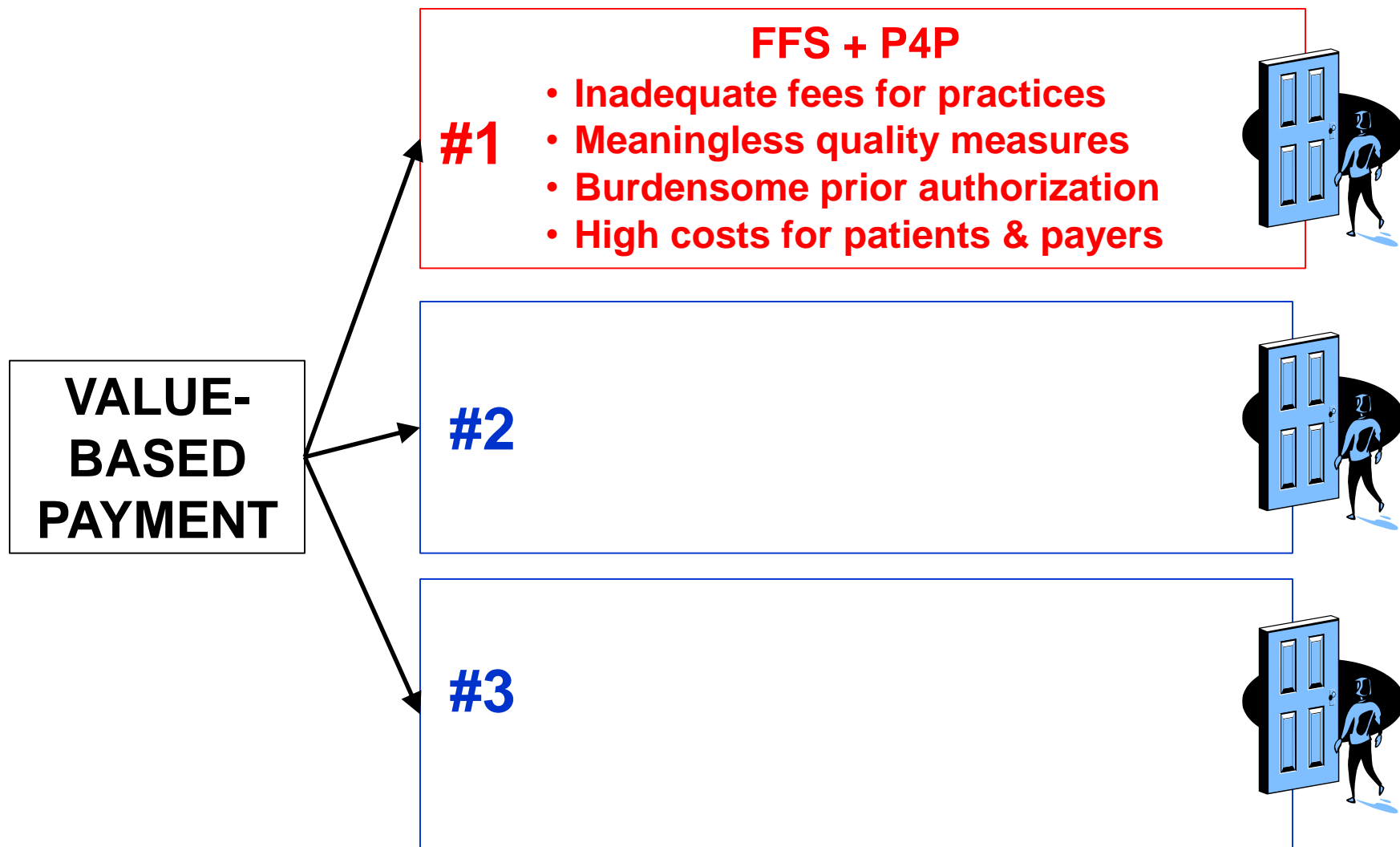
# Patient-Centered Payment for Cancer Can Be a Win-Win-Win



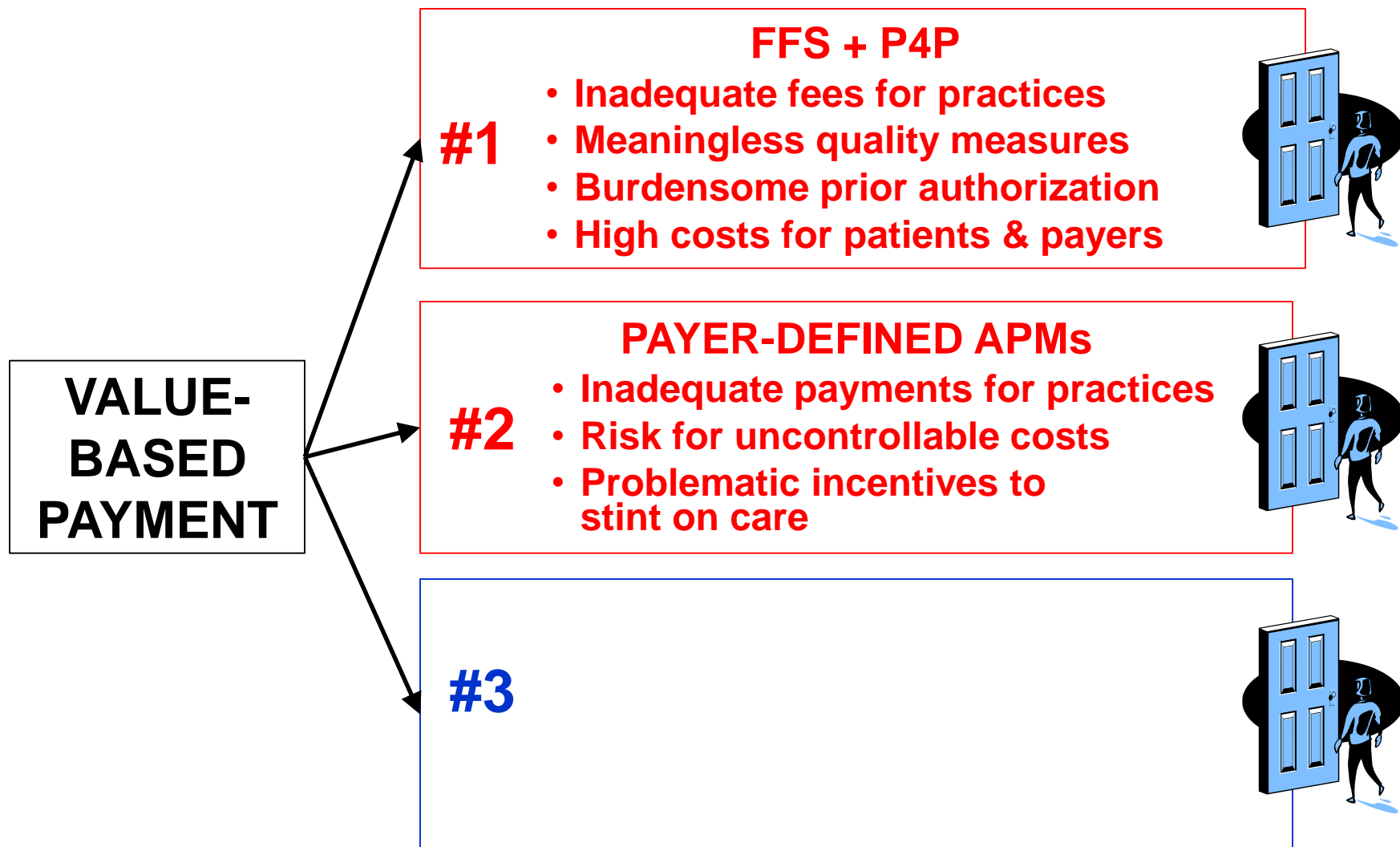
# Three Paths to the Future: Which Will Oncology Practices Choose?



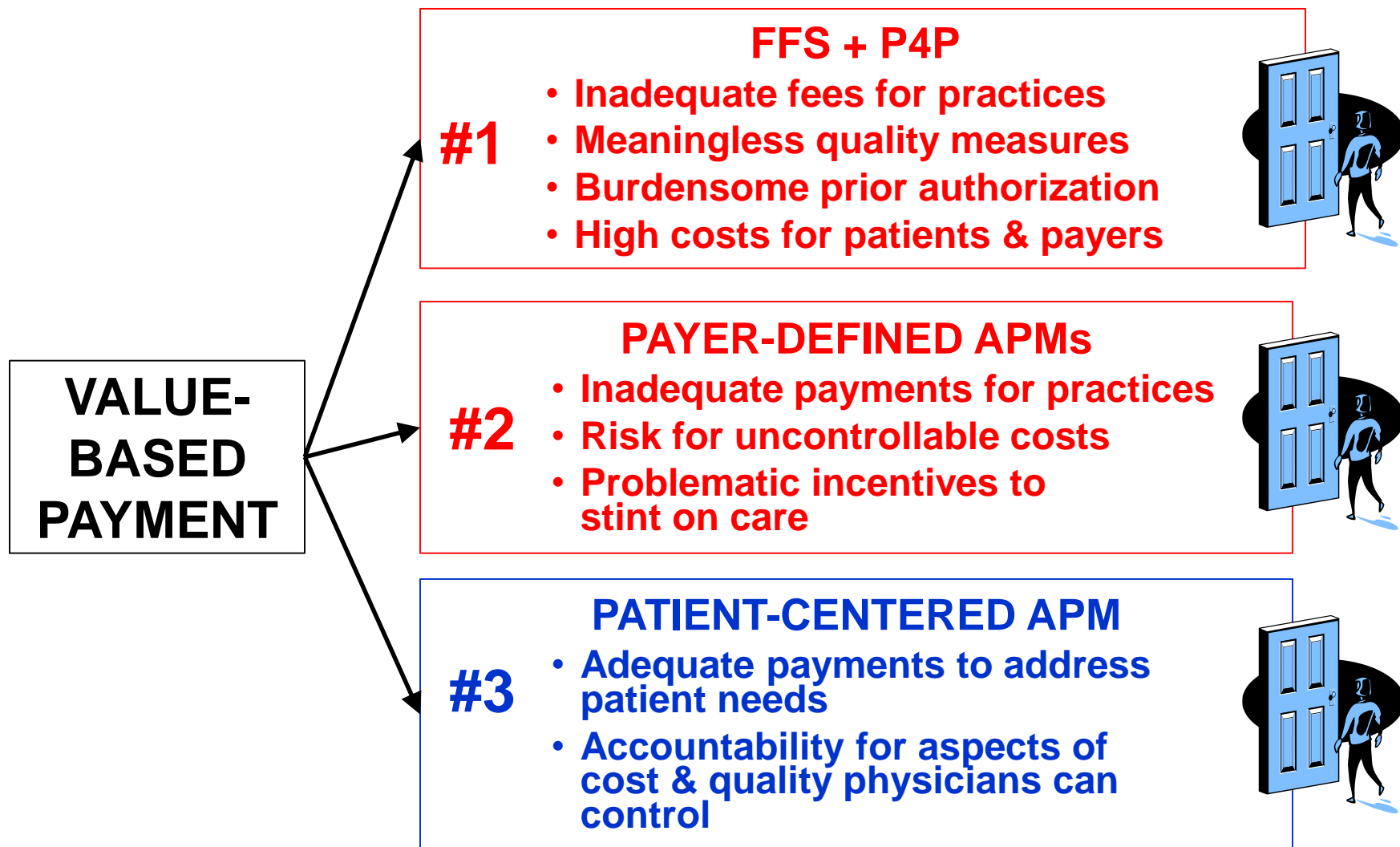
# Three Paths to the Future: Which Will Oncology Practices Choose?



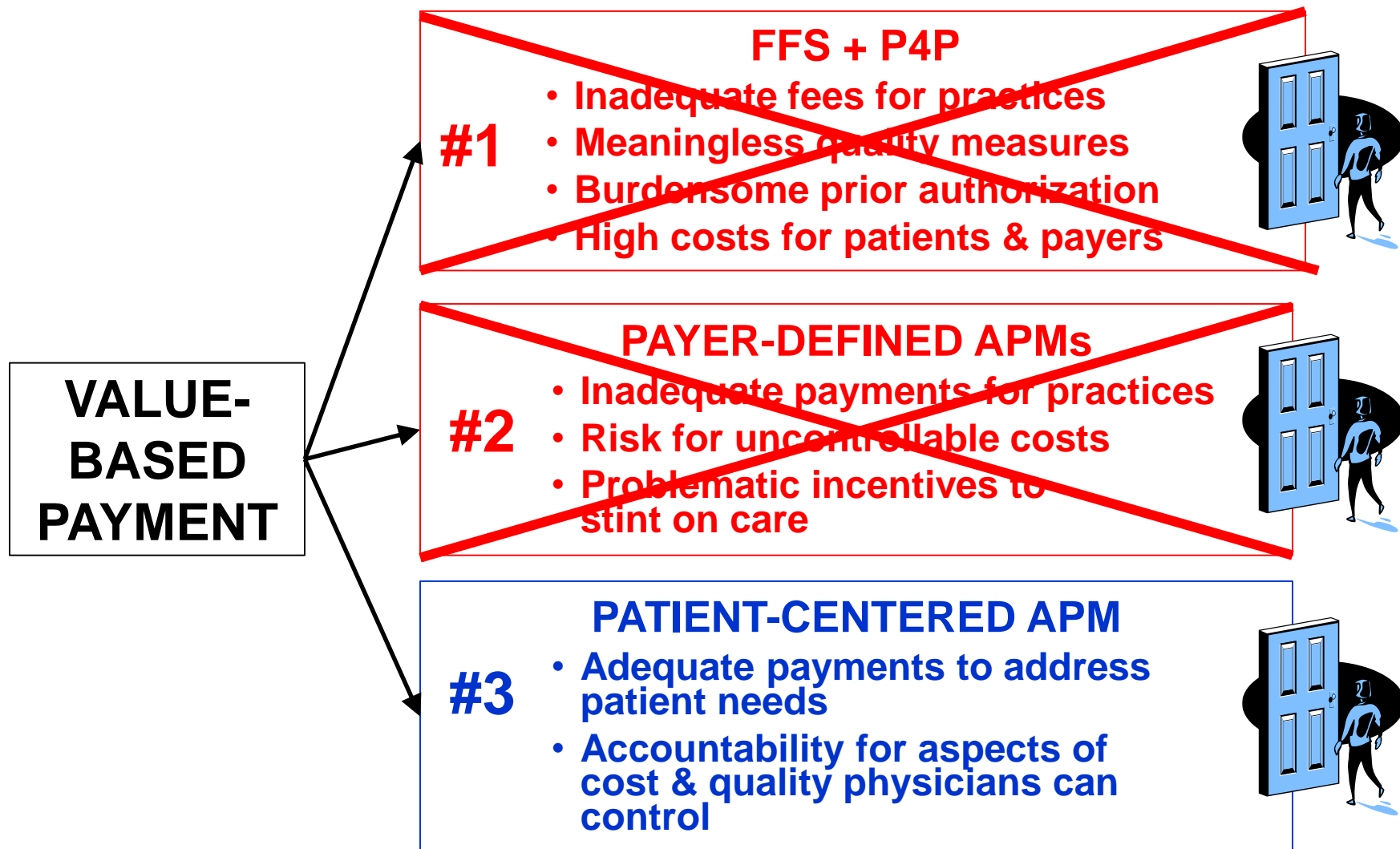
# Three Paths to the Future: Which Will Oncology Practices Choose?



# Three Paths to the Future: Which Will Oncology Practices Choose?



# If You Don't Like Options 1 & 2, What Should You Do?



# If You Don't Like Options 1 & 2, What Should You Do?

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1. Listen to PowerPoint presentations at this conference, go back home, continue business as usual, and hope somebody else figures this out

# If You Don't Like Options 1 & 2, What Should You Do?

---

- ~~1. Listen to PowerPoint presentations at this conference, go back home, continue business as usual, and hope somebody else figures this out~~
2. Plan to retire in 2020



# If You Don't Like Options 1 & 2, What Should You Do?

- ~~1. Listen to PowerPoint presentations at this conference, go back home, continue business as usual, and hope somebody else figures this out~~
- ~~2. Plan to retire in 2020~~
3. Take charge of value-based payment in oncology
  - Look at your own patient population, identify opportunities to reduce spending, and plan for care changes that would achieve savings if you can be paid the right way
  - Design a *patient-centered oncology payment model* that supports good care for patients & financial viability for practices
  - Take accountability for reducing avoidable spending
  - Demand that Medicare & health plans use *good APMs*
  - Refuse to participate in bad payer-designed APMs

# Tell CMS What It *Should* Do Instead of Giving You “More Risk”

## Public Listening Session: Potential Future Oncology Payment Model



The Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (Innovation Center) is announcing a Public Listening Session to gather feedback on value-based payment to support high-quality oncology care. The Innovation Center intends to release additional materials before the November 4, 2019 Public Listening Session. The Innovation Center will make an announcement once the additional materials have been posted to the Innovation Center website.

We appreciate stakeholder support and engagement with the Innovation Center and the ongoing [Oncology Care Model \(OCM\)](#), and seek to continue to engage stakeholders as we develop a potential new payment and service delivery model that builds on OCM. To that end, the Innovation Center will hold a Public Listening Session to gather feedback on a potential future oncology payment model. The Innovation Center believes this public input will strengthen and enhance a potential future oncology payment model. CMS plans to release more information closer to the date of the Public Listening Session.

### **What:**

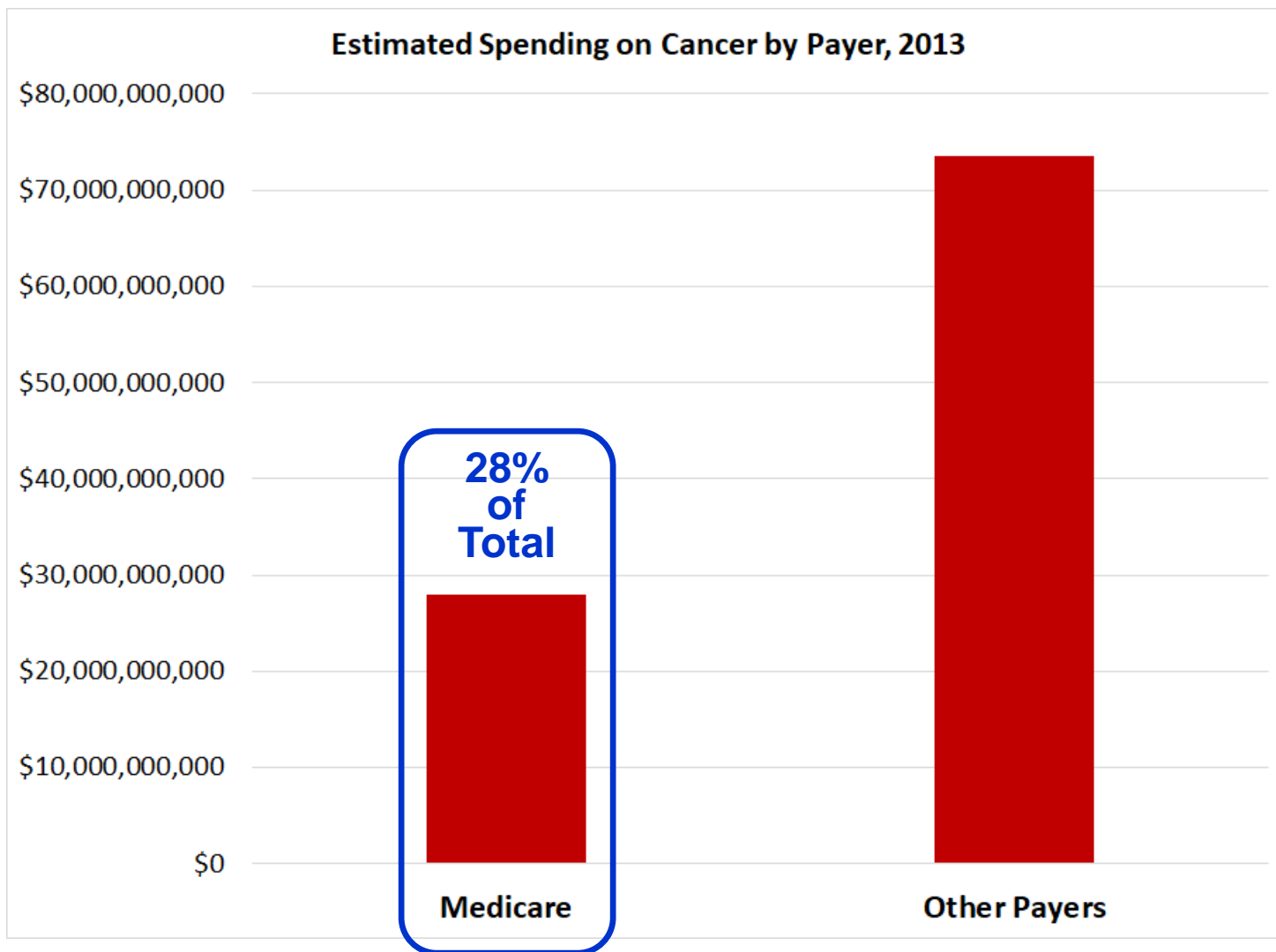
Public Listening Session: Potential Future Oncology Payment Model

### **When:**

Monday, November 4, 2019

1:00p.m. – 4:00p.m. EST

# Why Should Medicare Dictate How Oncologists Are Paid?

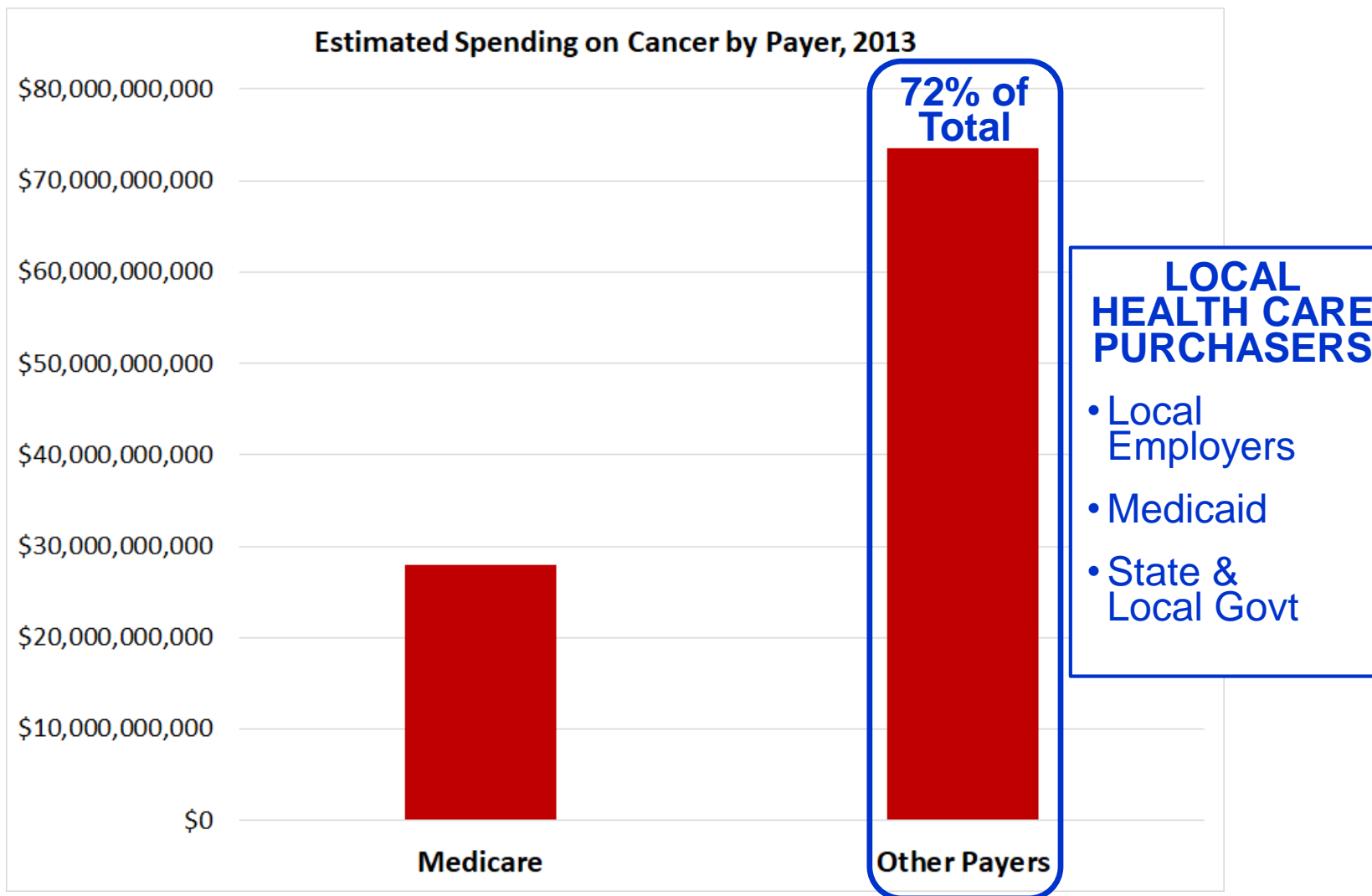


SOURCES:  
 U.S. Bureau of  
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 (Released  
 Sept. 2019)

Ruiz ES  
 et al,  
 "National  
 Cancer  
 Expenditure  
 Analysis  
 in the  
 United States  
 Medicare  
 Population,  
 2013,"  
*Journal of  
 Clinical  
 Oncology*  
 37(15),  
 May 2019

# Patients & Purchasers in Your Community Want *Good* Cancer Care

Estimated Spending on Cancer by Payer, 2013



SOURCES:  
U.S. Bureau of Economic Analysis, Health Care Satellite Account, 2016 Data (Released Sept. 2019)

Ruiz ES et al, "National Cancer Expenditure Analysis in the United States Medicare Population, 2013," *Journal of Clinical Oncology* 37(15), May 2019

# National Employers Are Fed Up With Current Approaches

## THE WALL STREET JOURNAL.

### Amazon Joins Trend of Sending Workers Away for Health Care

Employers pay staffers' expenses to travel to select hospitals and doctors, in bid to control costs

By *Melanie Evans*

Updated Oct. 15, 2019 12:06 pm ET

Employers are increasingly going the distance to control health spending, paying to send workers across the country to get medical care and bypassing local health-care providers.

One of the latest is [Amazon.com Inc.](#), [AMZN 1.78% ▲](#) which will pay travel costs for workers diagnosed with cancer who choose to see doctors at City of Hope, a Los Angeles-area health system. More than 380,000 of the Seattle-based company's employees and families across the U.S. are eligible for the travel benefit.



Amazon now covers travel costs for staffers with cancer who see City of Hope doctors in the Los Angeles area. City of Hope employees review a patient case. PHOTO: CITY OF HOPE

# Purchasers and Physicians Have Common Interests, But Don't Know It

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“We’ve started talking directly to physicians, and we’ve discovered that what they want to *sell* is what we want to *buy*...”

Cheryl DeMars  
CEO, The Alliance  
(Employer Coalition in Wisconsin)

# Take Back Control of Health Care!

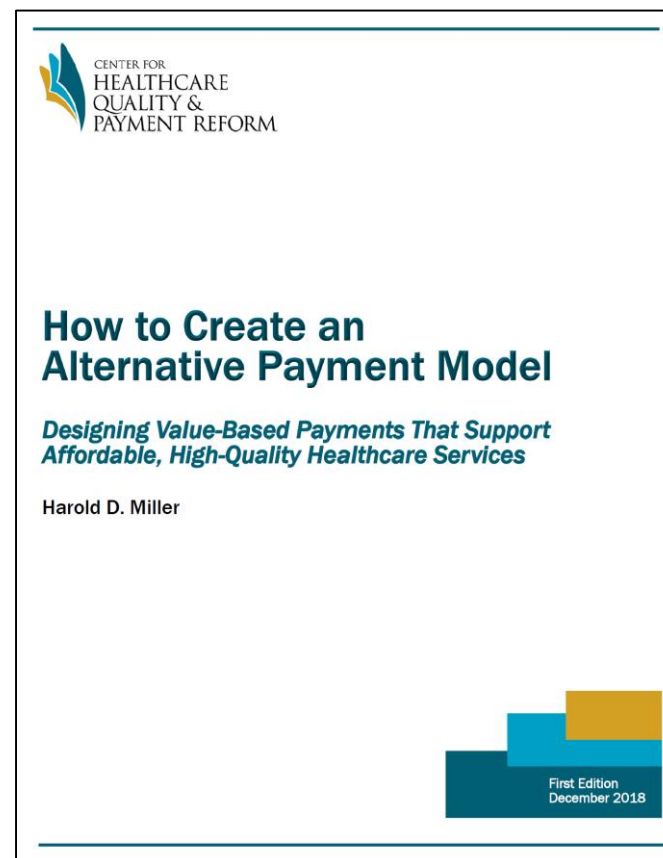
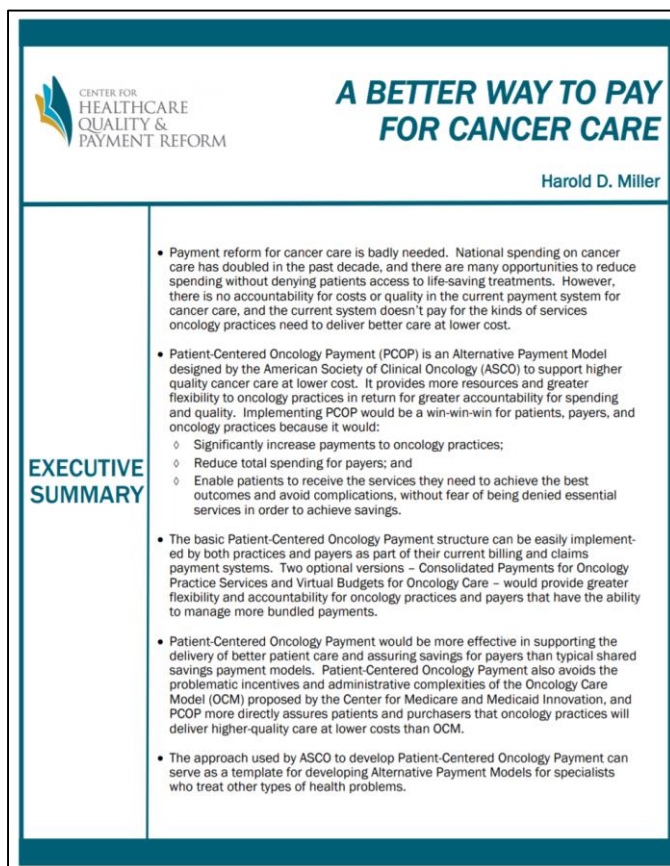
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## Take charge of cost and quality in oncology

- Look at your own patient population, identify opportunities to reduce spending, and plan for care changes that would achieve savings if you can be paid the right way
- Design a *patient-centered oncology payment model* that supports good care for patients & financial viability for practices
- Take accountability for reducing avoidable spending
- Demand that Medicare & health plans use *good* APMs
- Refuse to participate in bad payer-designed APMs
- Develop provider-purchaser partnerships to develop win-win-win approaches to cancer care

# More Details on How to Refine an Oncology APM

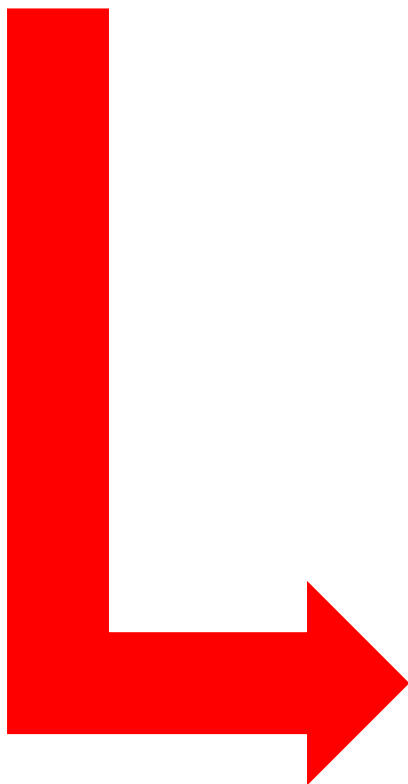
[www.PaymentReform.org](http://www.PaymentReform.org)





# Today's Slides Are Available Here

[www.PaymentReform.org](http://www.PaymentReform.org)



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QUALITY &  
PAYMENT REFORM

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**What's New**

- Presentation to Northern New England Clinical Oncology Society

**The Problems with the CMS "Primary Care First" Payment Model and How to Fix Them**

...the most important element of a truly "value-based" healthcare system is strong primary care. Unfortunately, the U.S. primary care system is at risk of collapse. Although there are multiple causes for this, a major reason is the failure of the current payment system to provide adequate resources to





# For More Information:

**Harold D. Miller**

President and CEO

Center for Healthcare Quality and Payment Reform

[Miller.Harold@CHQPR.org](mailto:Miller.Harold@CHQPR.org)

(412) 803-3650

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[www.CHQPR.org](http://www.CHQPR.org)

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