

# The American Medical Association Physician Payment Reform, the Oncology Medical Home: Emphasis on Lung Cancer

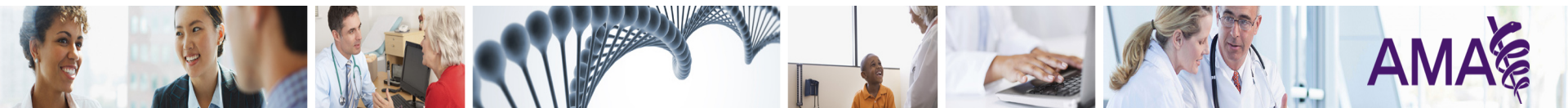
Barbara McAneny, MD

February 2017



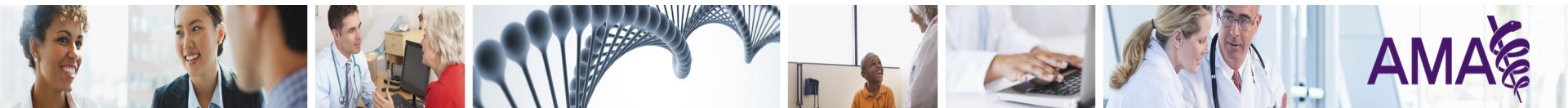
# Disclosure

**No relevant conflicts of interest to disclose.**



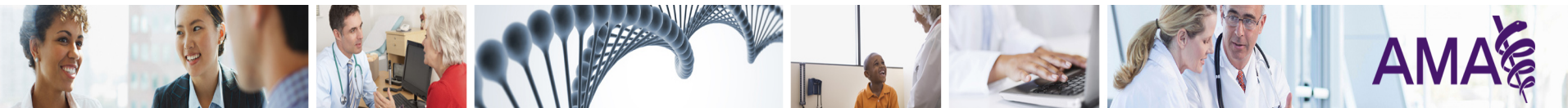
# Great Science: Now what?

- How do we get it to the patients?
- How do we make it affordable?



# The Challenge

- 30 patients to see every day
- Volumes of medical literature to read
- A tsunami of Data to synthesize
  - Patients needing the best possible treatment
  - Insurance Companies Hasseling
  - Lawyers lurking





THE ASCO POST  
Revisiting Certification: Updates From ASH and ABIM  
Clinical knowledge and know-how

ASH Clinical News  
Your source for worldwide news and insights on hematology/oncology

Health Affairs  
At the intersection of health, health care, and policy

Journal of oncology practice  
The Authoritative Resource for Practicing Oncology

JOURNAL OF CLINICAL ONCOLOGY  
Official American Society of Clinical Oncology Journal

JAMA Oncology

Annals of Internal Medicine  
18 February 2013 • Volume 158 • Number 4

JAMA  
Journal of the American Medical Association

Modern Healthcare  
THE BEST HEALTHCARE NEWS SOURCE EVER SINCE 1982

JNCCN  
Journal of the National Comprehensive Cancer Network

CA  
A Cancer Journal for Clinicians

ONCOLOGY  
Clinical Advances in HEMATOLOGY & ONCOLOGY  
Blood Transfused Donates Cell  
HEB-1 Targets Metastatic Colorectal Cancer: Ready for Prime Time?  
Approach to the Surgical Management of Invasive Cervical Cancer  
Newport Campaign for Annual Pap Smear for Cervical Cancer

THE LANCET Oncology

The Oncologist  
Vol. 21, No. 9, September 2016

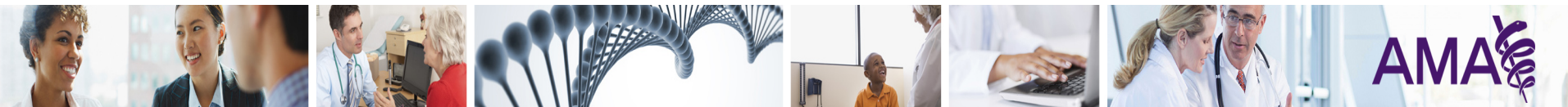
Modern Healthcare WHY

Science  
REPORT TO THE CONGRESS  
Promote for Immune Estrogening  
How Inhibitor changes between Bacteria  
The Stage is set for cancer and delivery

The NEW ENGLAND JOURNAL of MEDICINE  
September 21, 2016

## Turn the page

- **JIB-04** (NSC693627, E-isomer) is a potent, selective and cell permeable Jumonji histone demethylase inhibitor. Unlike the other known inhibitors, JIB-04 is not a competitive inhibitor of  $\alpha$ -ketoglutarate. It inhibits the demethylase activity of Jumonji enzymes in vitro, with  $IC_{50}$  ~230 nM for JARID1A (KDM5A), ~440 nM for JMJD2A (KDM4A) and JMJD2B (KDM4B), ~340 nM for JMJD2E (KDM2E), and ~1  $\mu$ M for JMJD3 (KDM6B) and JMJD2C (KDM4C). JIB-04 blocks Jumonji demethylase activity in cells and consequently inhibits cell growth, without affecting other  $\alpha$ -ketoglutarate-dependent hydroxylases or histone-modifying enzymes, especially HDACs. JIB-04 alters transcriptional programs in cancer but not in normal cells, leading to cancer-specific cell death. Importantly, in vivo, JIB-04 lowers histone demethylase activity in tumors, reduces tumor burden and prolongs survival of mice in an aggressive breast cancer model.





## Turn the page

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survival of **MICE** in an aggressive breast cancer model.



# Non-Small Cell Lung Cancer (NSCLC)

Version: COME HOME v1.1 - last updated February 2016

Stage IA

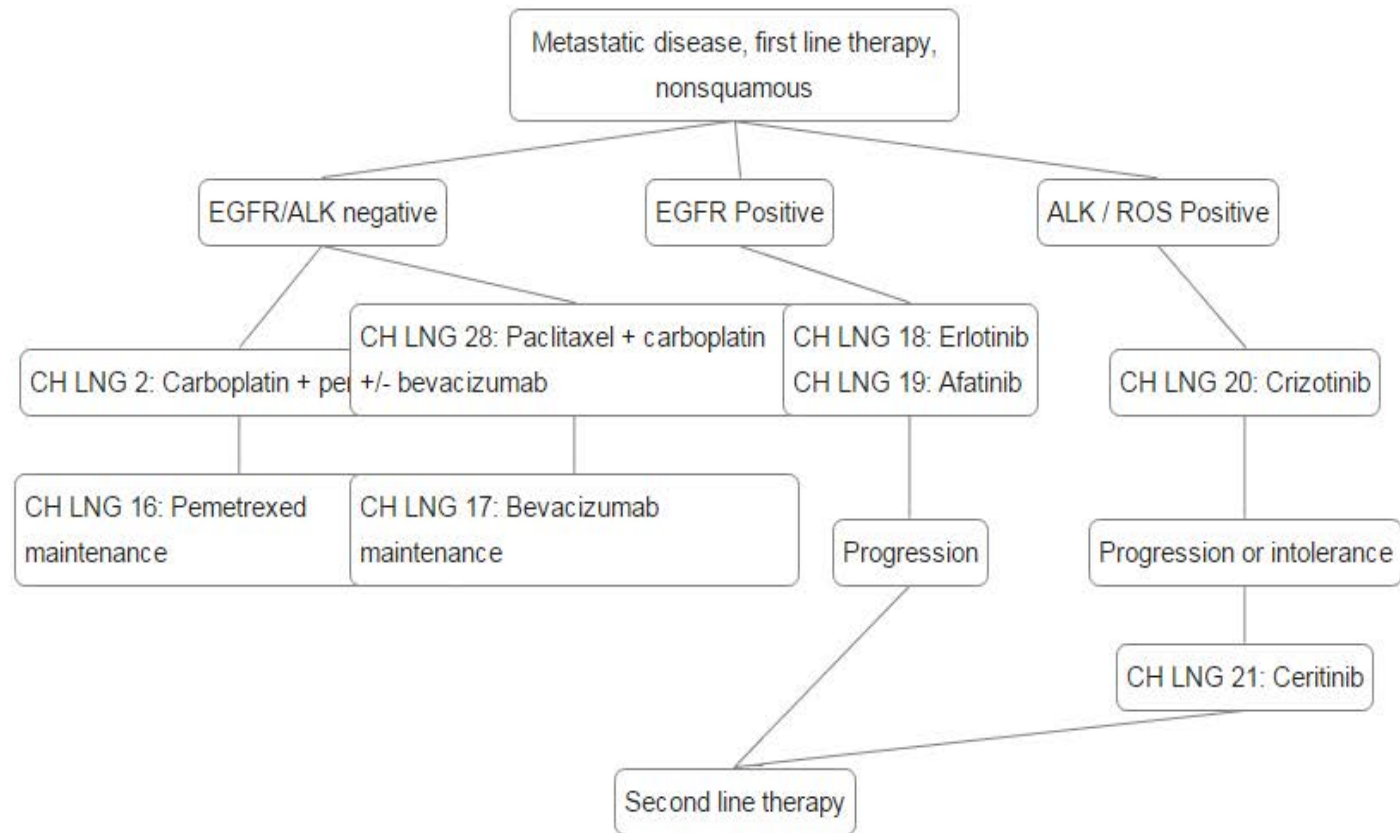
Stage IB, IIA, IIB

Stage IIIA

Stage IIIB

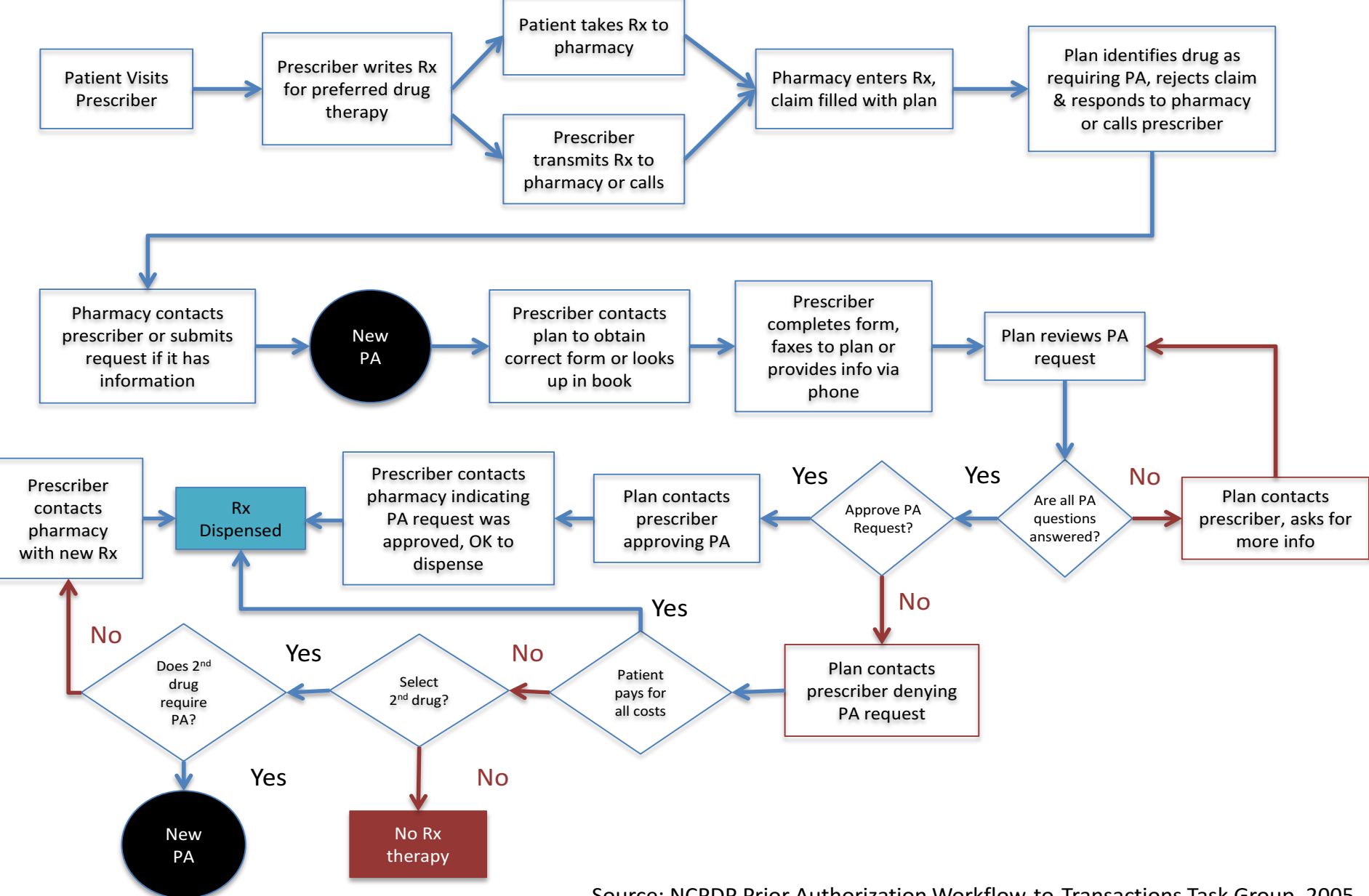
Metastatic  
disease, first line  
therapy,  
nonsquamous

Metastatic  
disease, first line  
therapy,  
squamous





# Prior Authorization Process

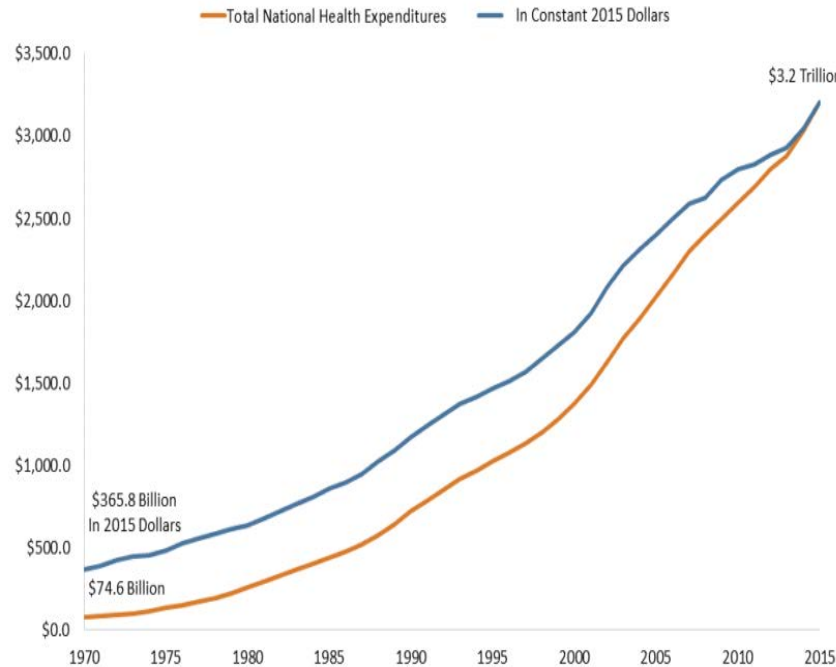


Source: NCPDP Prior Authorization Workflow-to-Transactions Task Group, 2005

# Rising health care costs are unsustainable

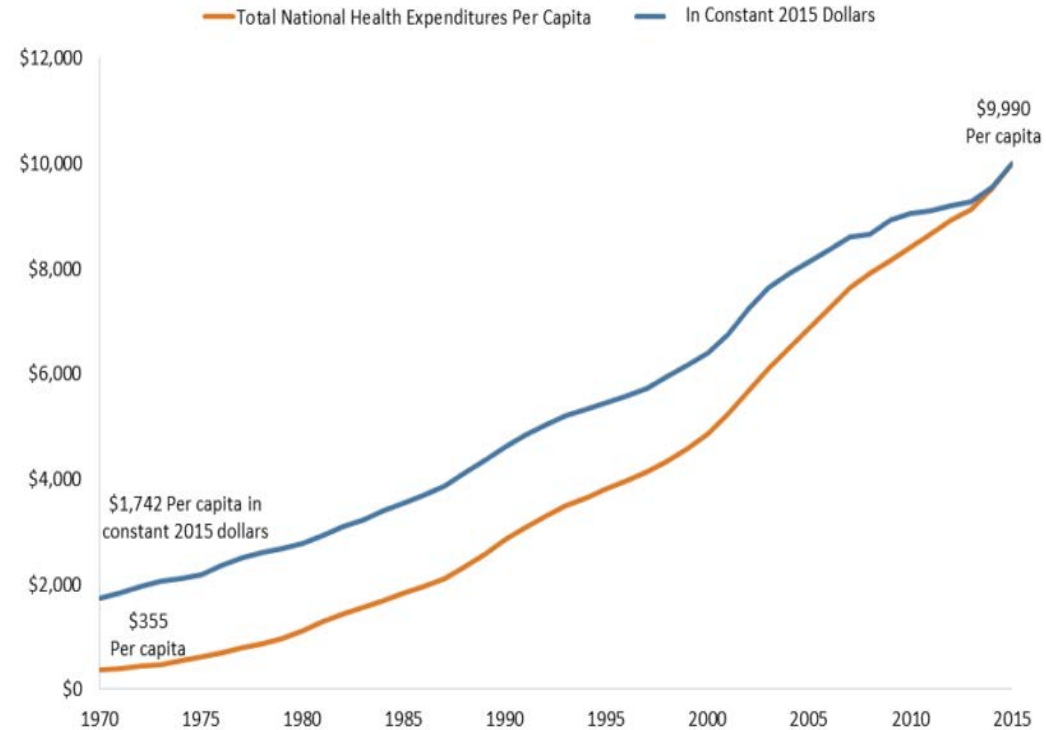
Total national health expenditures, US \$ per capita, 1970-2015

Total national health expenditures, US \$ Billions, 1970-2015



Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group

Peterson-Kaiser Health System Tracker

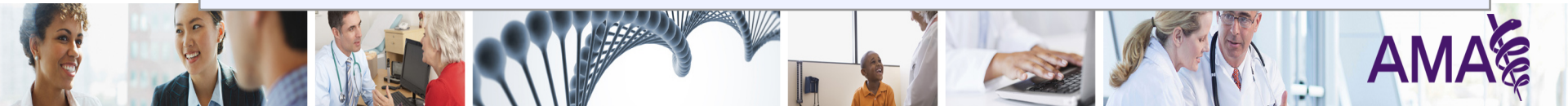
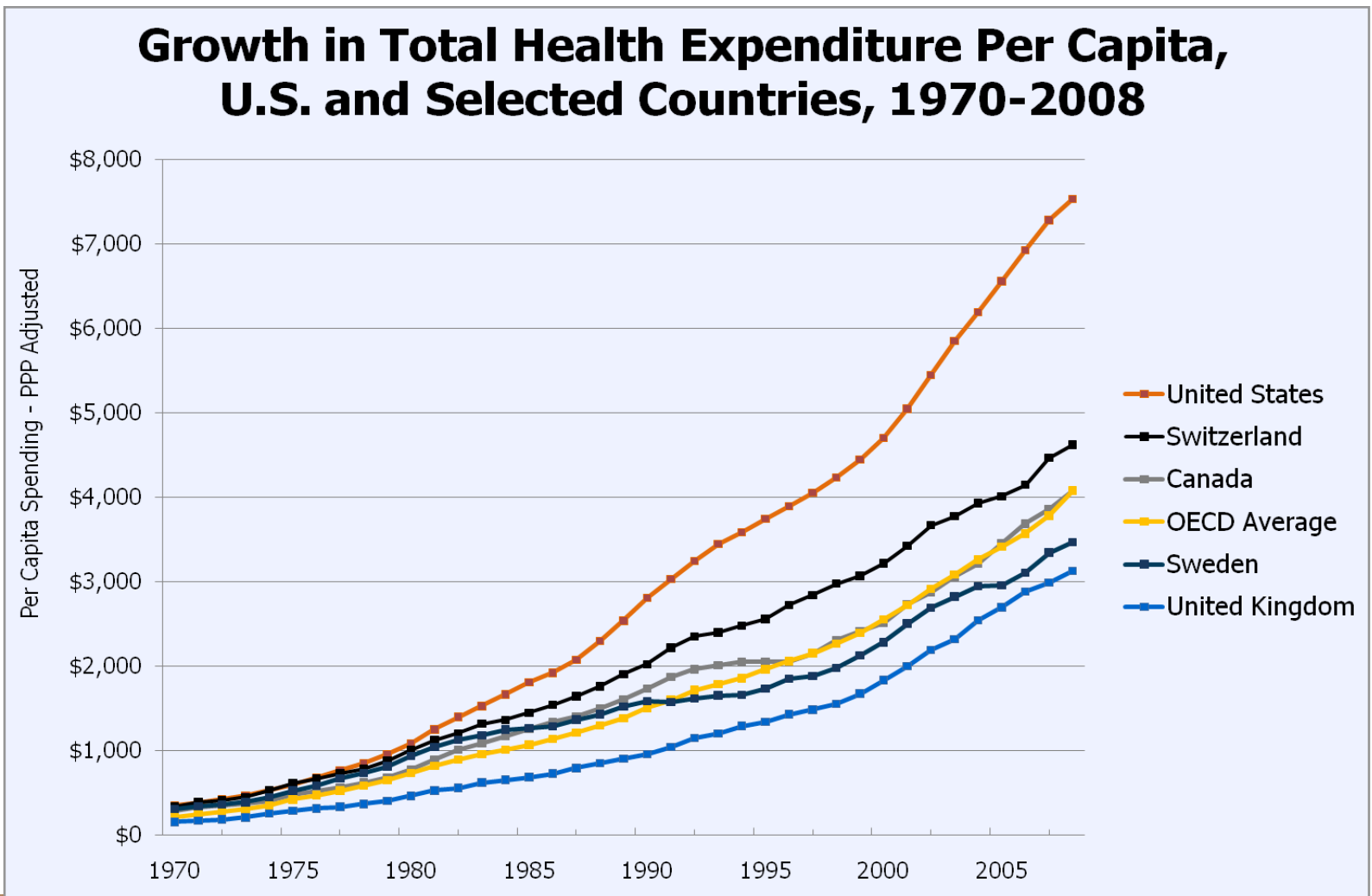


Source: Kaiser Family Foundation analysis of National Health Expenditure (NHE) data from Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group

Peterson-Kaiser Health System Tracker



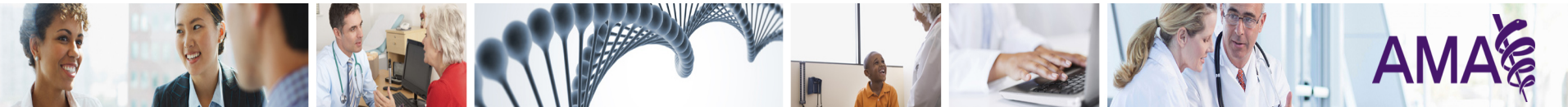
# Global Growth in Spending



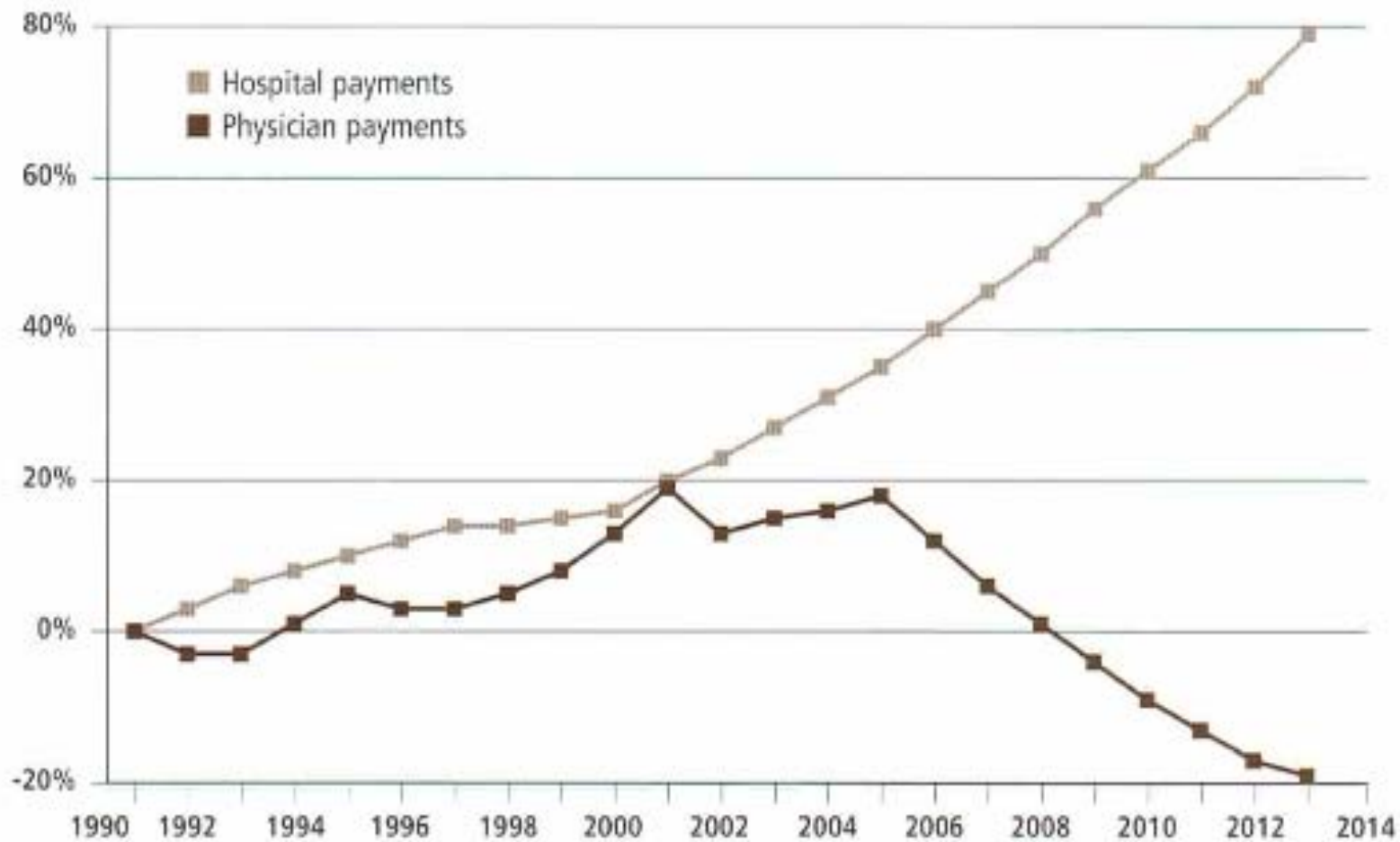
# Difference between observed and modeled Medicare FFS spending in 2014 under site of service shifting scenarios

	Cost impact in billions in 2014			
	Shift to 25% of 2004 observed levels	Shift to 50% of 2004 observed levels	Shift to 75% of 2004 observed levels	Shift to 100% of 2004 observed levels
Estimated Medicare FFS spending cost difference in 2014 if observed chemotherapy infusion site of service distribution was shifted toward 2004 site of service distribution	\$0.5	\$1.0	\$1.5	\$2.0

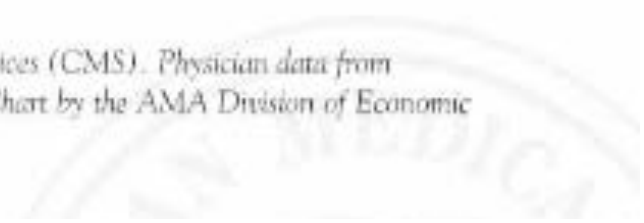
Source: Based on Milliman analysis of the 2004-2014 Medicare 5% sample data. See Appendix D for Medicare population and cost.



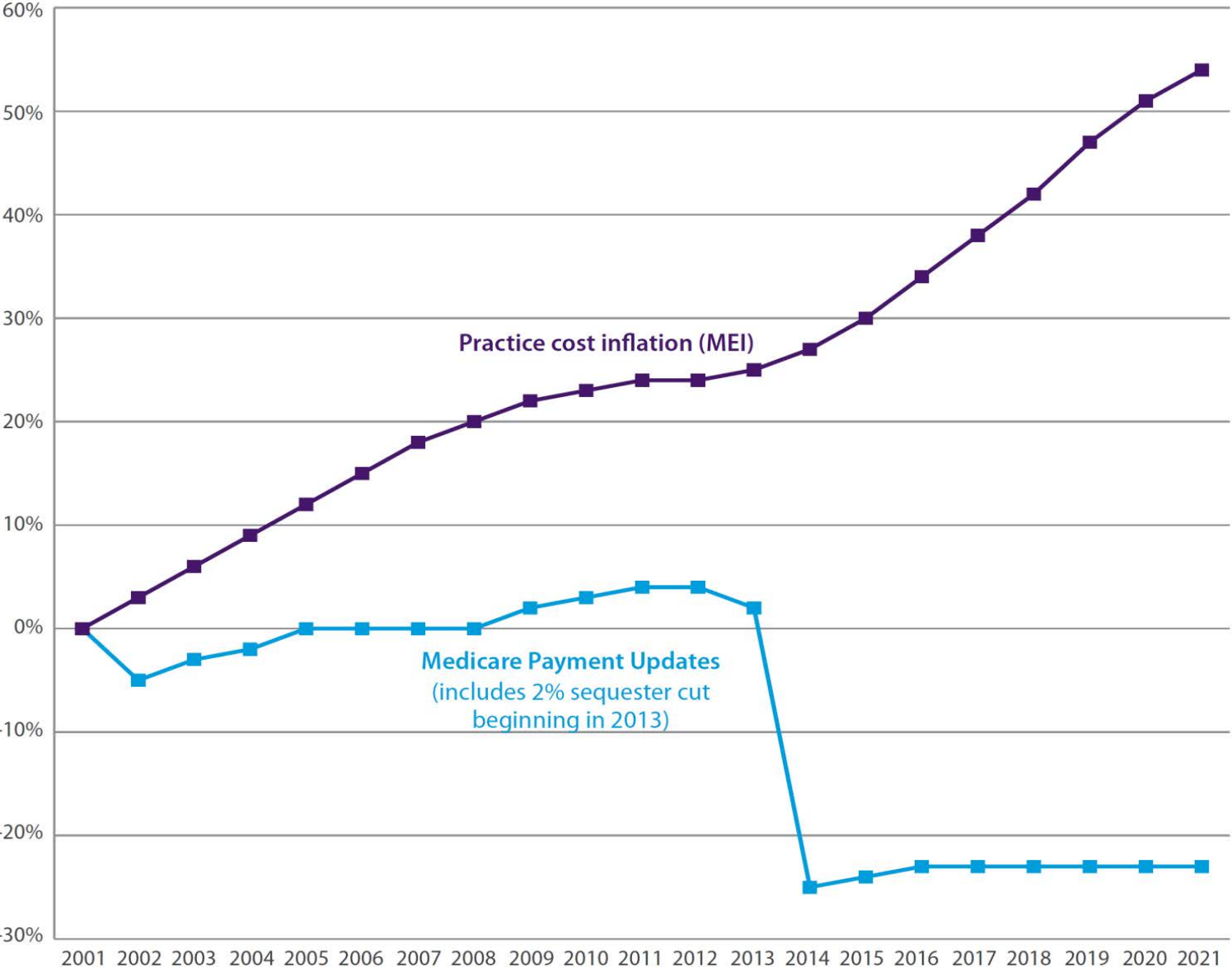




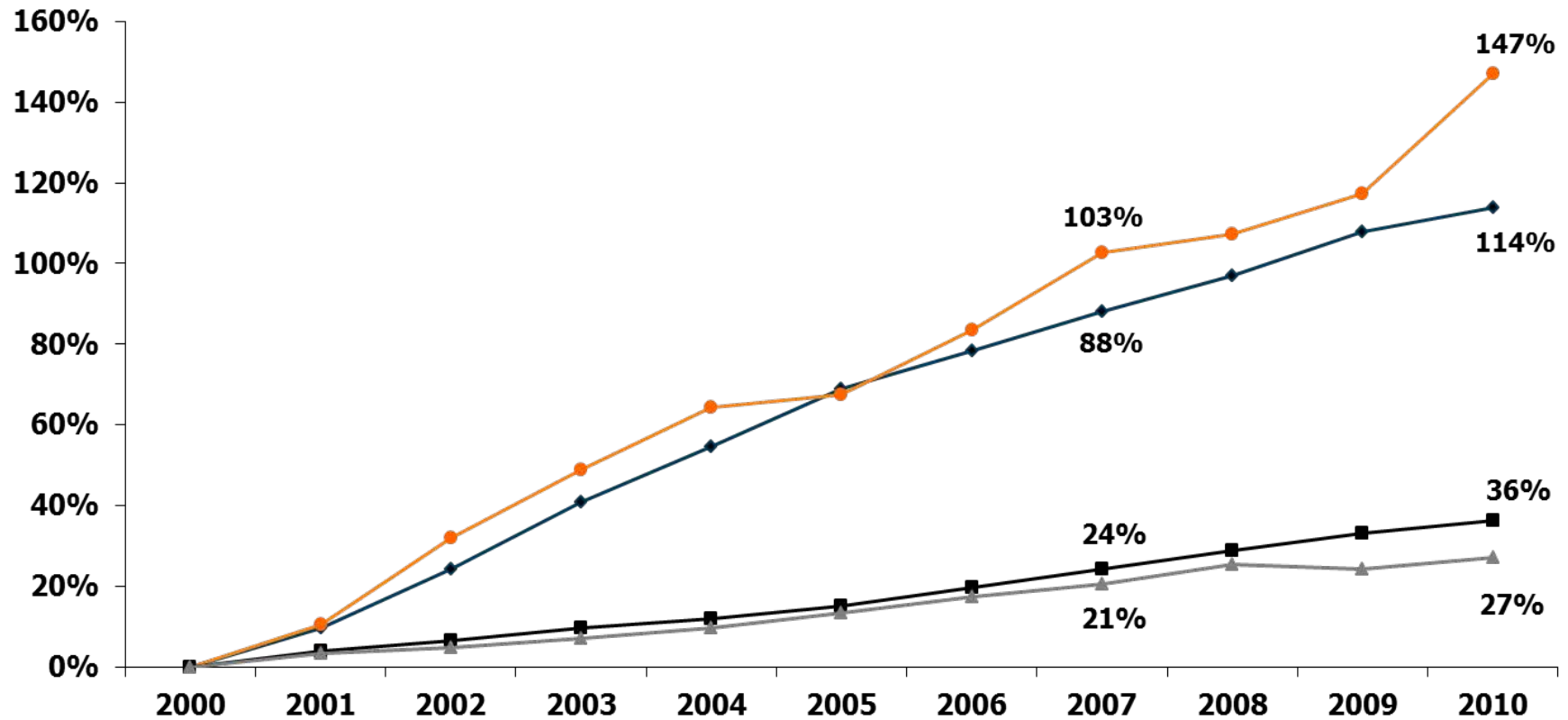
Sources: Hospital data from MedPAC and the Centers for Medicare & Medicaid Services (CMS). Physician data from Physician Payment Review Commission (PPRC), the AMA and Medicare trustees. Chart by the AMA Division of Economic and Statistical Research.



# Medicare payment vs. practice cost inflation

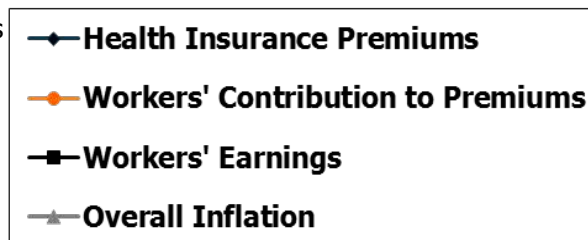


# Cumulative Increases in Health Insurance Premiums, Workers' Contributions to Premiums, Inflation, and Workers' Earnings, 2000-2010

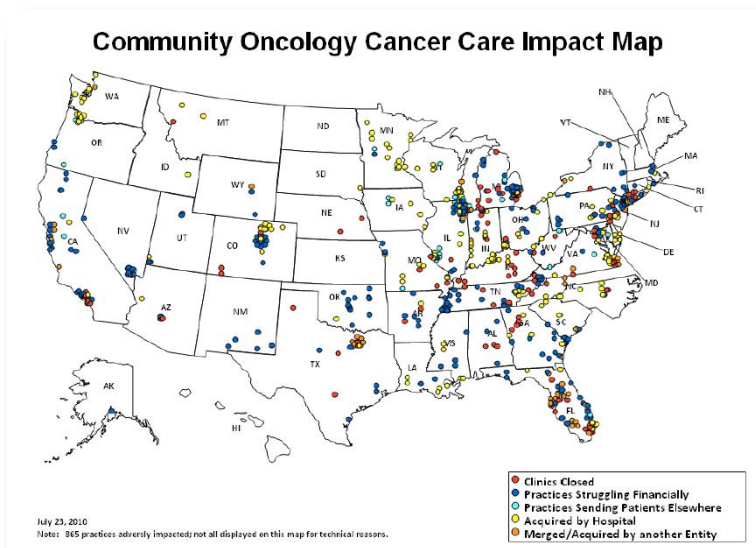


Notes: Health insurance premiums and worker contributions are for family premiums based on a family of four.

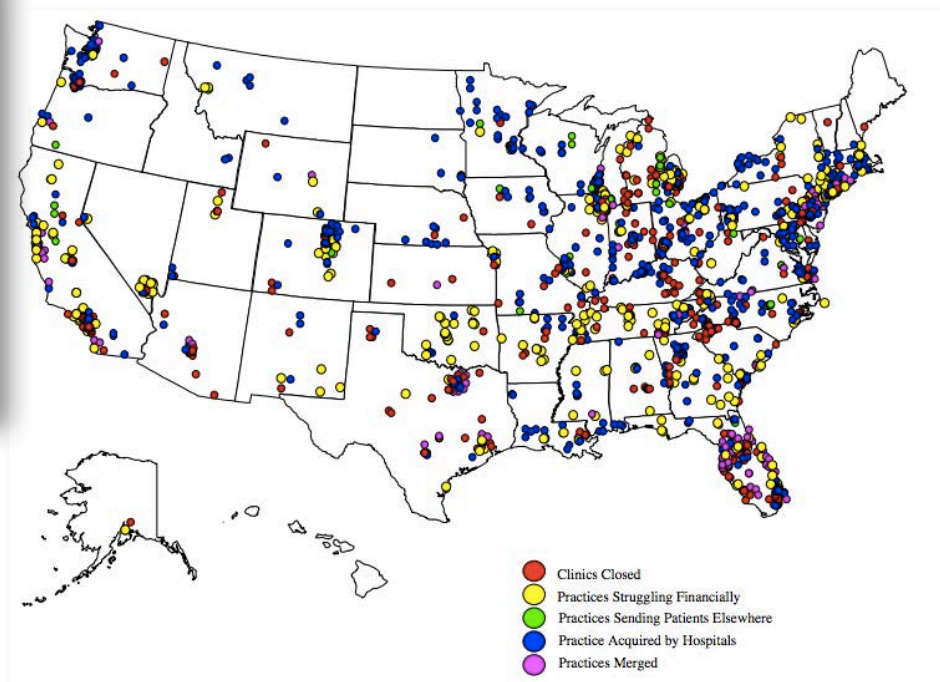
Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2011. Bureau of Labor Statistics, Consumer Price Index, U.S. City Average of Annual Inflation (April to April), 1999-2011. Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey, 1999-2011 (April to April).



# Consolidation of Cancer Care

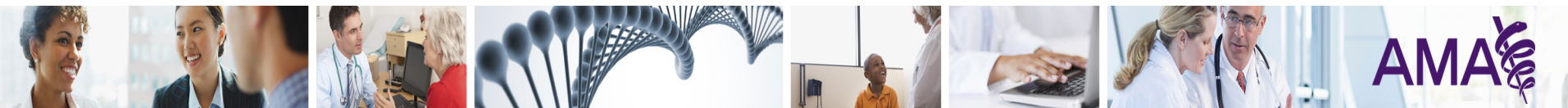


2010



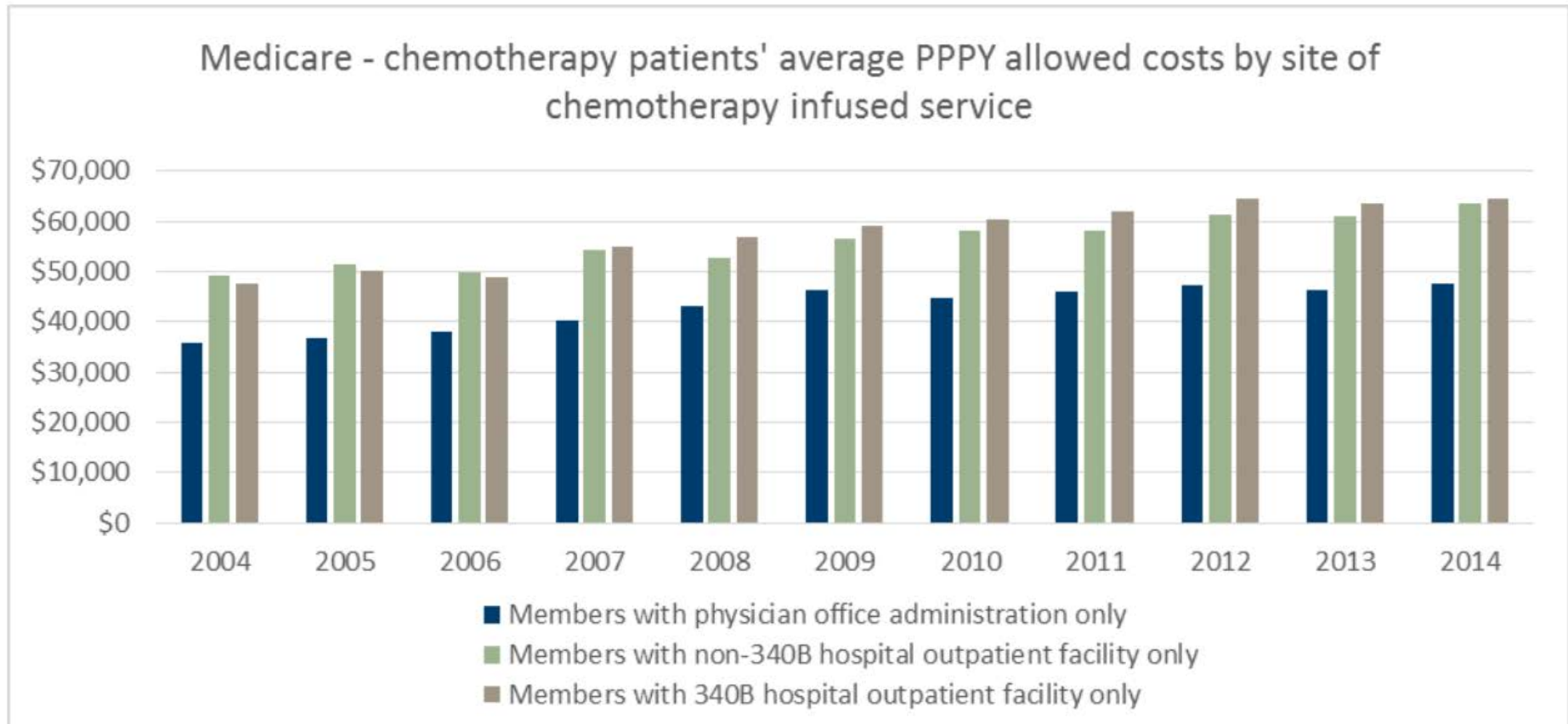
2016

Source: COA Community Oncology Practice Impact Report, October 2014





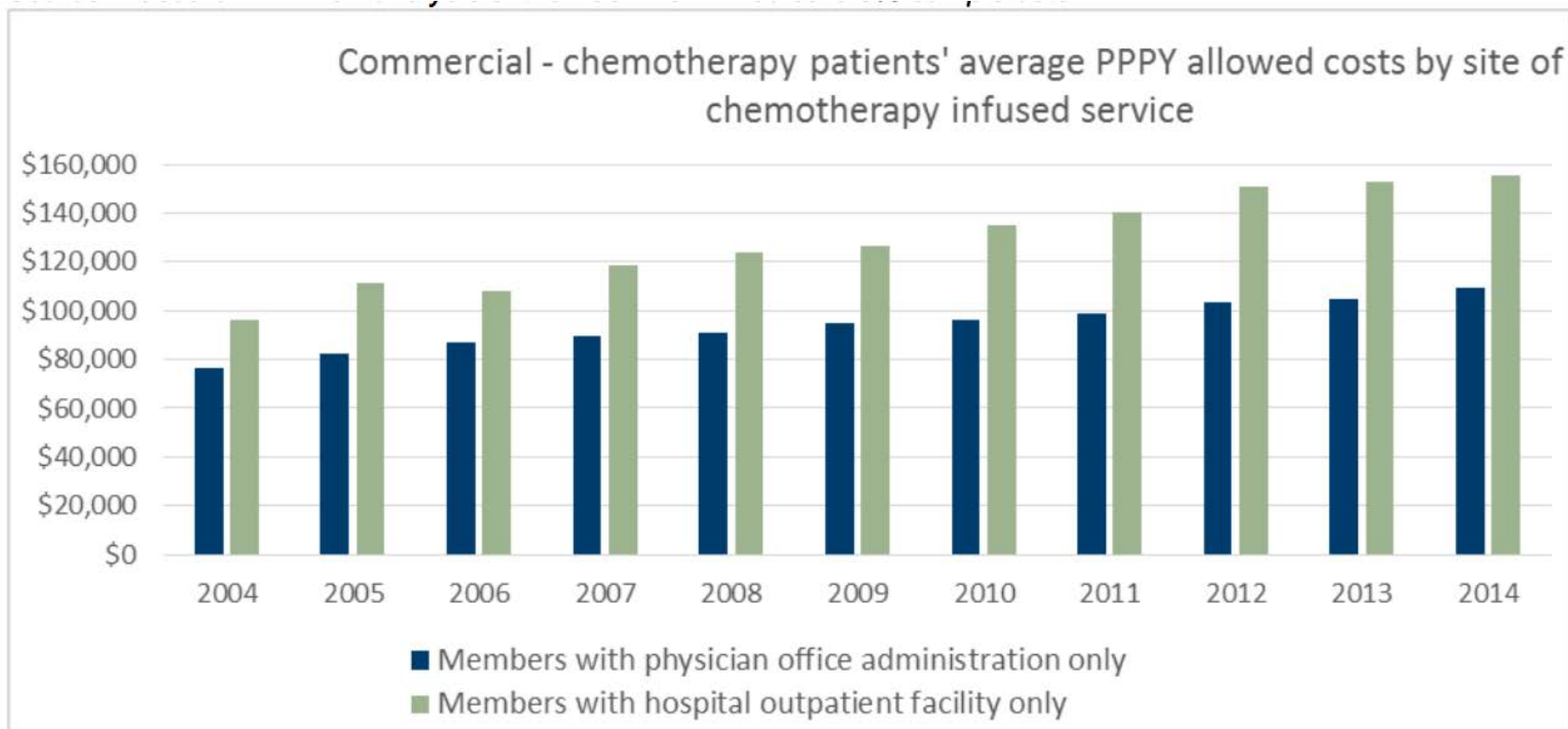
# PPPY Costs based on site of chemotherapy service - Medicare



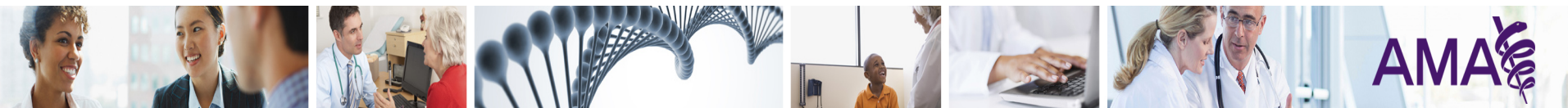
Source: Based on Milliman analysis of the 2004-2014 Medicare 5% sample data



# PPPY Costs based on site of chemotherapy service - Commercial



Source: Based on Milliman analysis of the 2004-2014 Truven MarketScan data



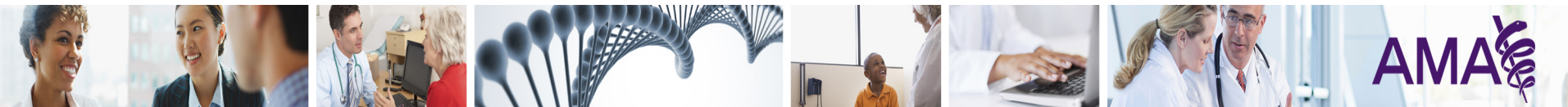
# Cost of Consolidation: Milliman 2011 & Avalere 2012 Studies

- Milliman 2011 study on Medicare costs by site-of-service
  - \$6,500 annualized higher chemo treatment costs in outpatient hospitals versus MD community cancer clinics
  - \$650 annualized higher out-of-pocket costs for Medicare beneficiaries
- Avalere 2012 on private payer costs by site-of-service
  - Up to 76% higher chemo treatment costs in outpatient hospitals versus clinics
  - 24% higher on average in outpatient hospitals

## Sources:

*Site of Service Cost Differences for Medicare Patients Receiving Chemotherapy*, Milliman, October 2011

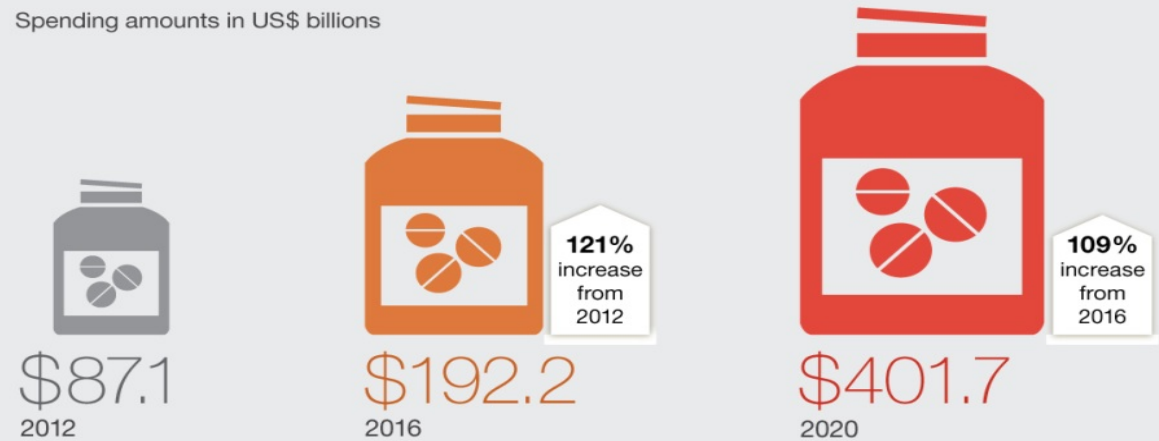
*Total Cost of Cancer Care by Site of Service: Physician Office vs Outpatient Hospital*, Avalere, March 2012



# US specialty drug spending will quadruple by 2020

Projected specialty drug spending from 2012 to 2020

Spending amounts in US\$ billions



For more information, please visit:  
[pwc.com/us/medicalcosttrend](http://pwc.com/us/medicalcosttrend)

Source: PwC Health Research Institute, *Medical cost trend: Behind the numbers 2015*, June 2014, analysis based on data from CVS Caremark

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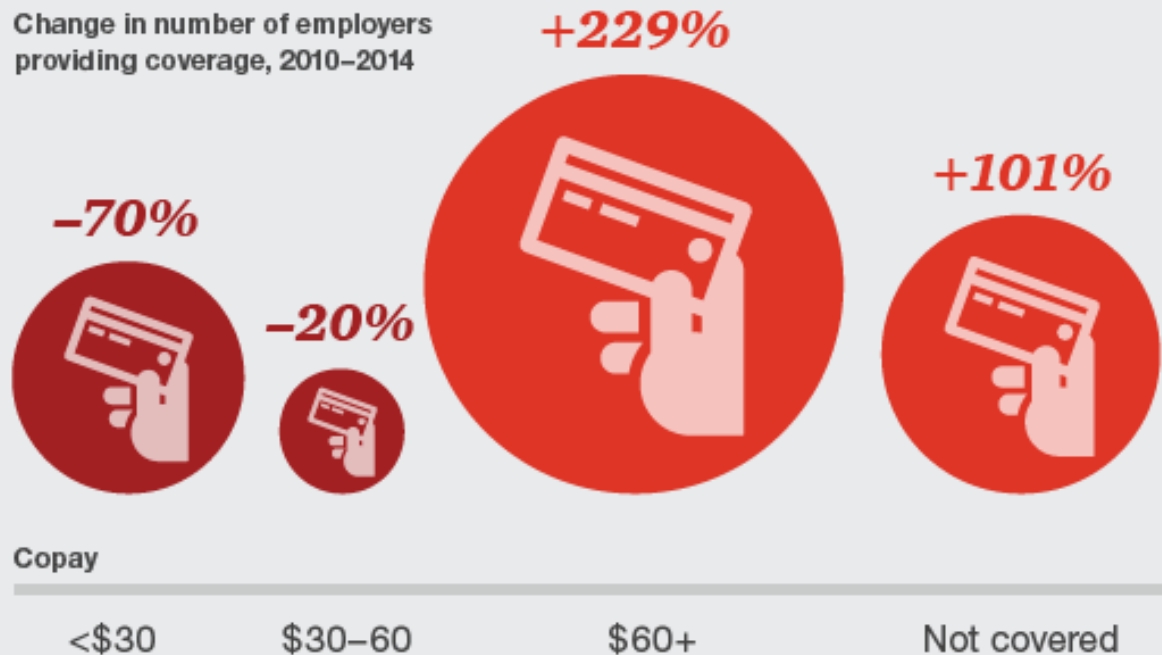
Payers  
responding

...

## Workers face increased copays for specialty drugs

Employees may be expected to pay a greater share for their treatments as businesses and insurers impose high copays for specialty drugs. This year, 34% of employers told PwC that they will use copays greater than \$60 for specialty drugs, which has grown by 229% since 2010.

Change in number of employers providing coverage, 2010–2014



Source: PwC's Health Research Institute: *Behind the Numbers 2015*

Source: PwC's Health Research Institute: *Behind the Numbers 2015*

# COME HOME

- Focus on the patients with expensive illnesses
- What factors can doctors control?
- What data do we need to prevent complications?



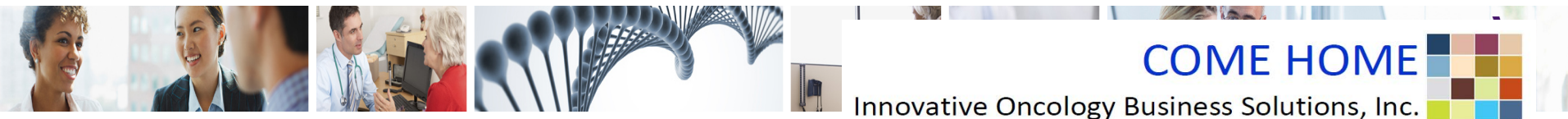
COME HOME

Innovative Oncology Business Solutions, Inc.



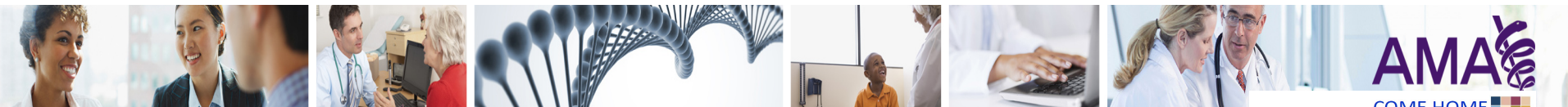
## CMS/CMMI Grant

- \$19.8M
- 7 practices
- Significant savings associated with Oncology Medical Home through reduced ED & IP use
- Improve quality of care through triage protocols, team care and clinical pathways
- Increase delivery of patient-centered care through after hours clinics, same day appointments, patient education and patient portal



# COME HOME Project Partners

- Innovative Oncology Business Solutions (IOBS) – managing organization formed for the purposes of administering project
- Seven community oncology practices
  - New Mexico Cancer Center
  - Center for Cancer & Blood Disorders (Ft. Worth)
  - Dayton Physician Network (OH)
  - Space Coast Oncology
  - New England Cancer Specialists
  - NW Georgia Oncology Centers
  - Austin Oncology Group
- NantHealth – HIT company creating customized quality & pathway performance dashboards using claims data and integrated EHRs
- KEW Group – integration of genetic markers into diagnostic and therapeutic pathways
- UTHSC – evaluation, cost, quality measurement expertise; using claims data for rapid-cycle feedback of cost/utilization performance





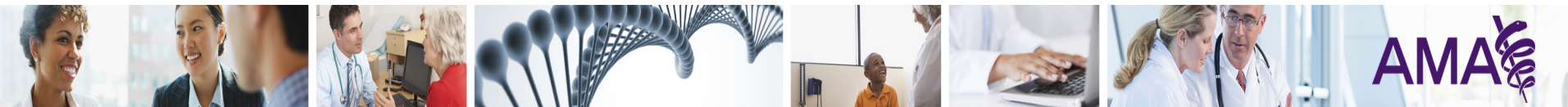
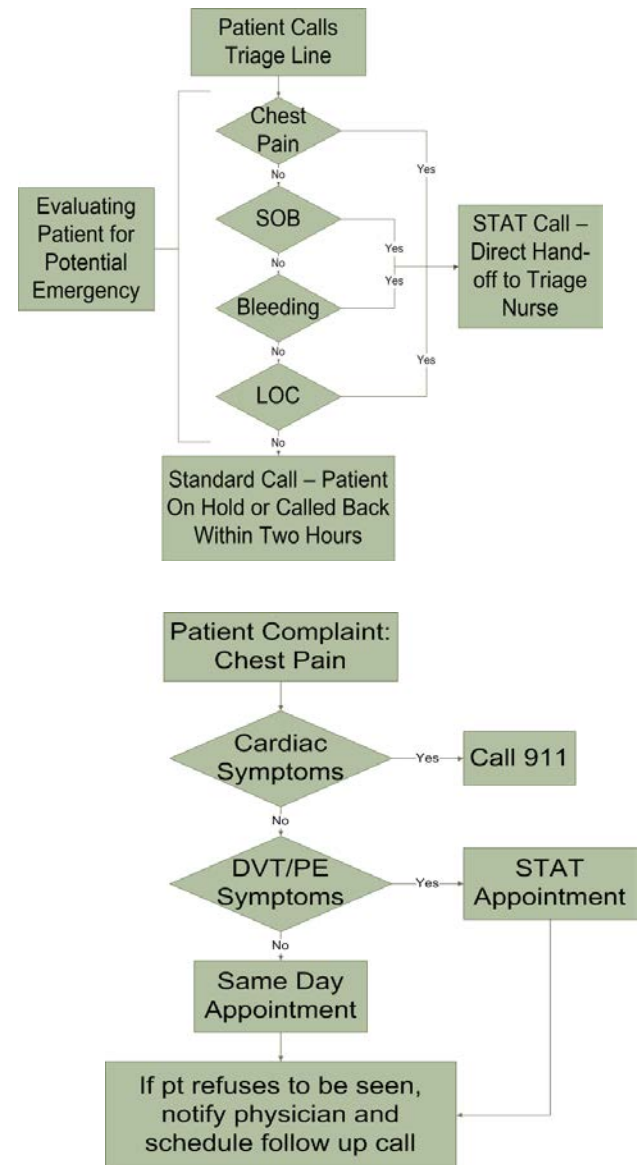
## Clinical Pathway Compliance Report

Breast	StructuredData	Staging Components	M0 pN1a T2	Patient 1	YES
Breast	StructuredData	Performance Status	1	Patient 1	YES
Breast	StructuredData	Treatment Type	170	Patient 1	YES
Breast	StructuredData	Treatment Intent	165	Patient 1	YES
Breast	StructuredData	ER Status	P	Patient 1	YES
Breast	StructuredData	PR Status	N	Patient 1	YES
Breast	StructuredData	HER2 Status	-	Patient 1	NO
Breast	StructuredData	Tumor Size	2.0	Patient 1	YES
Breast	StructuredData	Diagnosis Date	2014/06/01 00:00:00.000	Patient 1	YES
Breast	StructuredData	Stage	-	Patient 1	NO
Breast	StructuredData	Staging Date	-	Patient 1	NO
Breast	StructuredData	Staging Components	-	Patient 1	NO
Breast	StructuredData	ER Status	-	Patient 1	NO
Breast	StructuredData	PR Status	-	Patient 1	NO
Breast	StructuredData	HER2 Status	-	Patient 1	NO
Breast	StructuredData	Tumor Size	-	Patient 1	NO
Breast	StructuredData	Diagnosis Date	2014/02/27 00:00:00.000	Patient 2	YES
Breast	StructuredData	Stage	Stage IIA	Patient 2	YES
Breast	StructuredData	Staging Date	2014/02/27 00:00:00.000	Patient 2	YES
Breast	StructuredData	Staging Components	M0 N0 T2	Patient 2	YES
Breast	StructuredData	Performance Status	1	Patient 2	YES
Breast	StructuredData	ER Status	-	Patient 2	NO
Breast	StructuredData	PR Status	-	Patient 2	NO
Breast	StructuredData	HER2 Status	-	Patient 2	NO

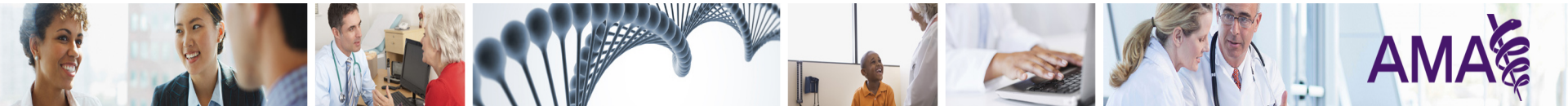
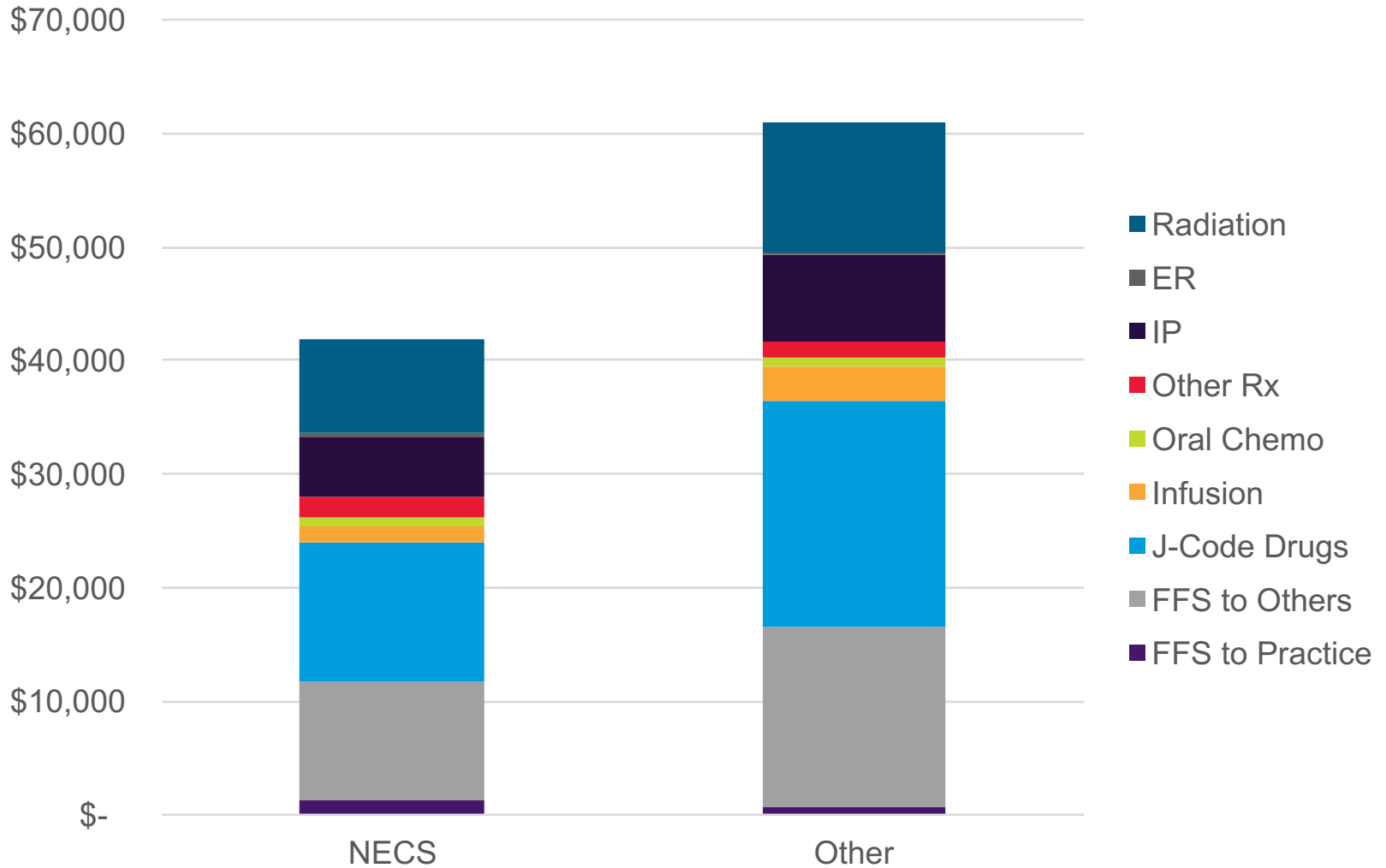
# Triage Pathways

***Patients get the Right Care at the Right Time in the Right Place***

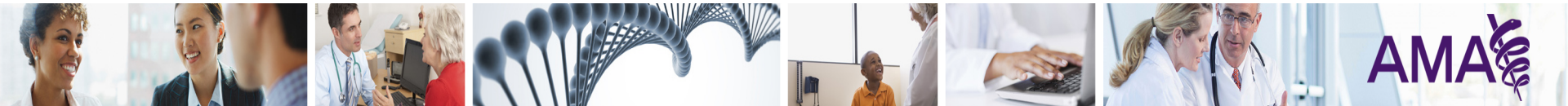
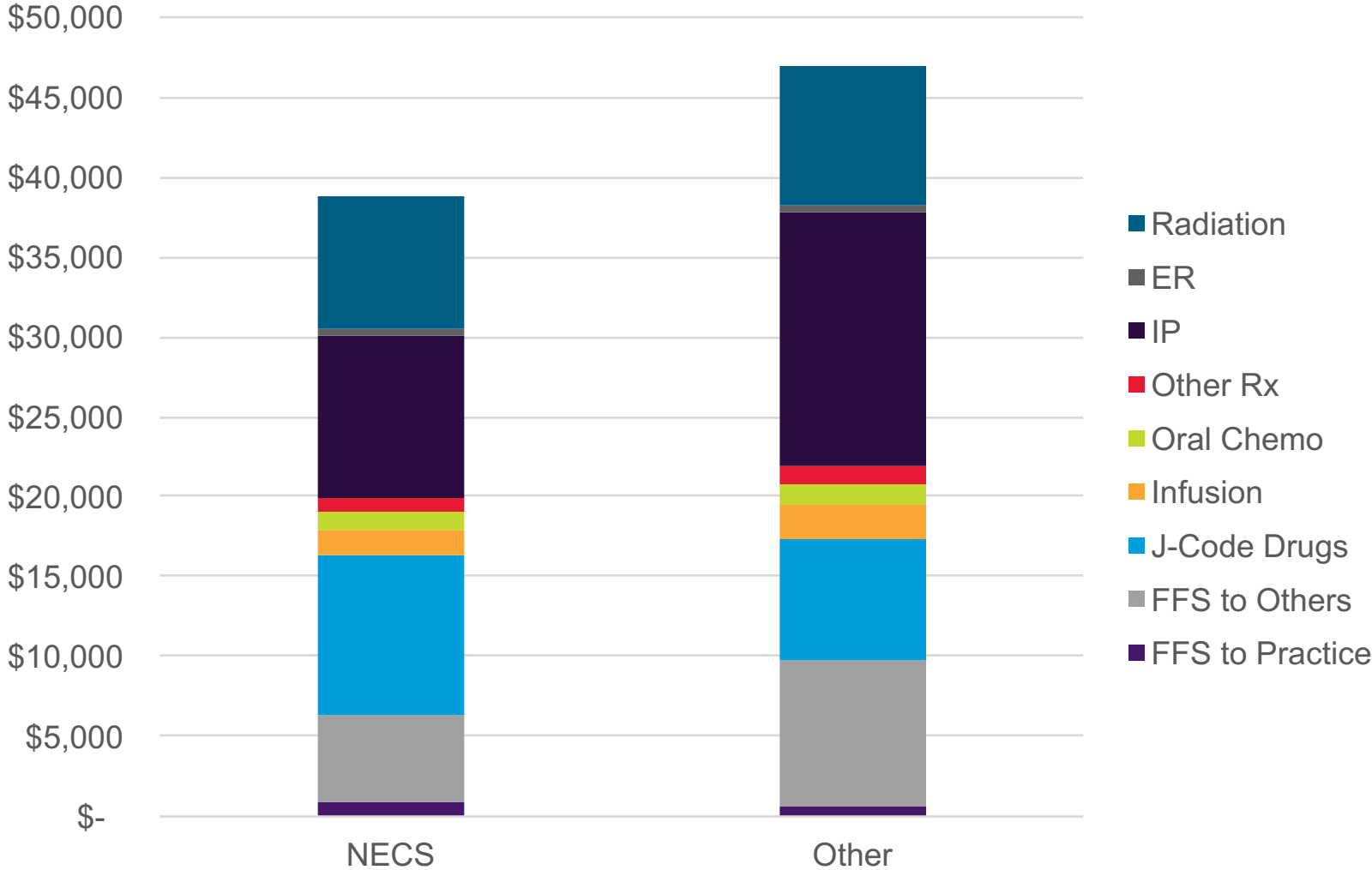
- 38 Symptom Specific Pathways
  - E.g. pain, nausea & vomiting, fatigue, cough
  - Many also include follow ups for patients that can be managed at home
  - Consistent, systematic triage of patient symptoms
- Real time dashboard visible to all triage staff
- Standard order sets for defined patient groups
  - E.g. pts. on chemo with vomiting are brought in for hydration and have review of anti-emetics.



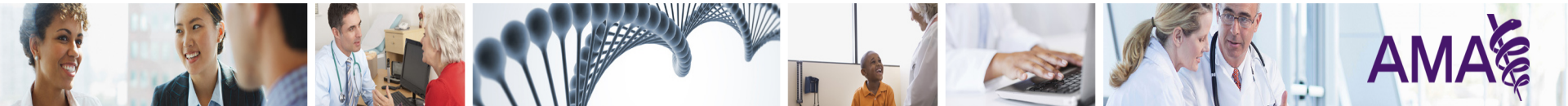
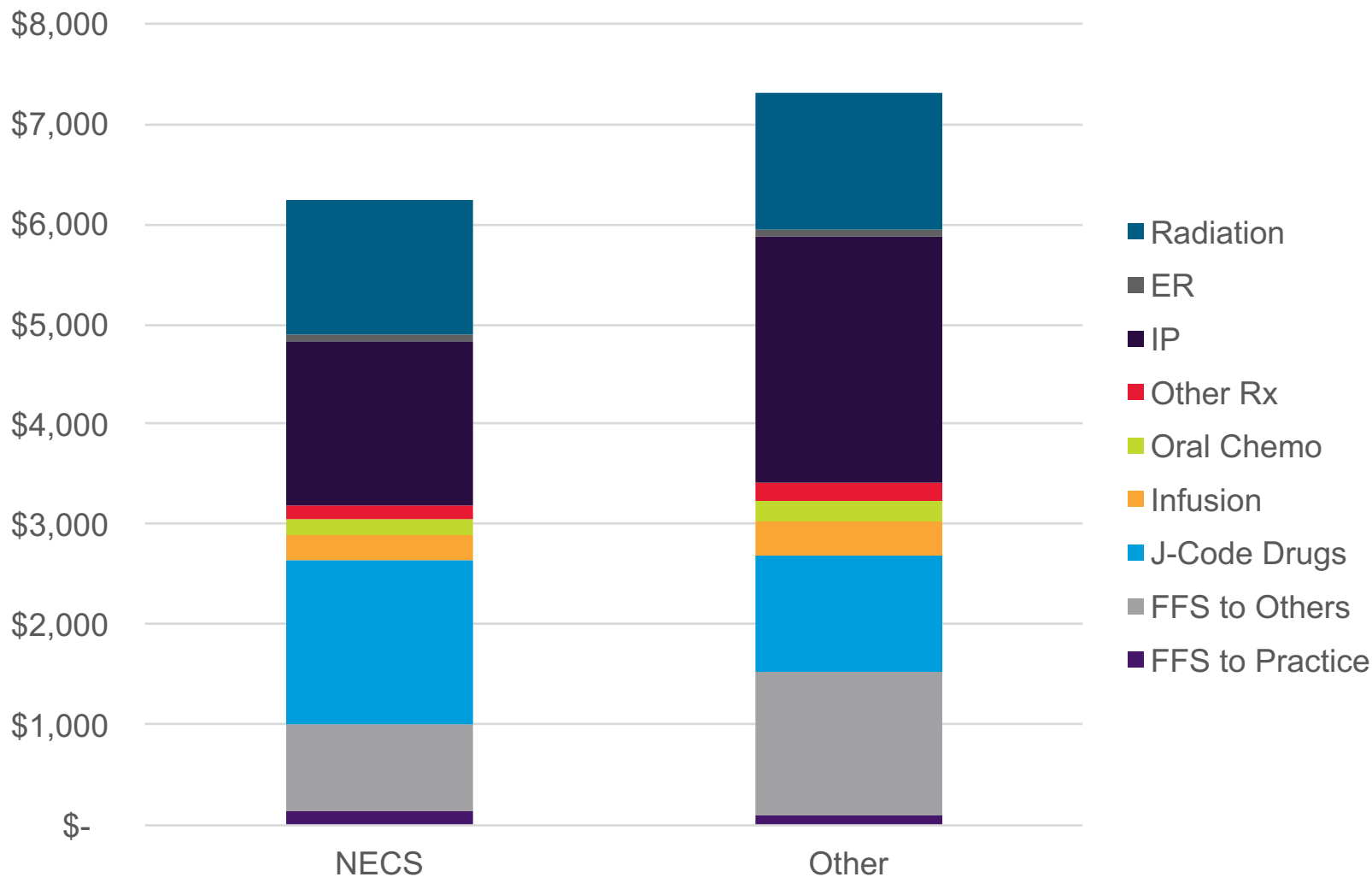
# Breast Cost/Patient



# Lung Cost/Patient

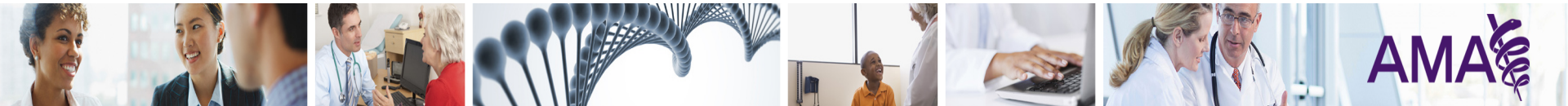
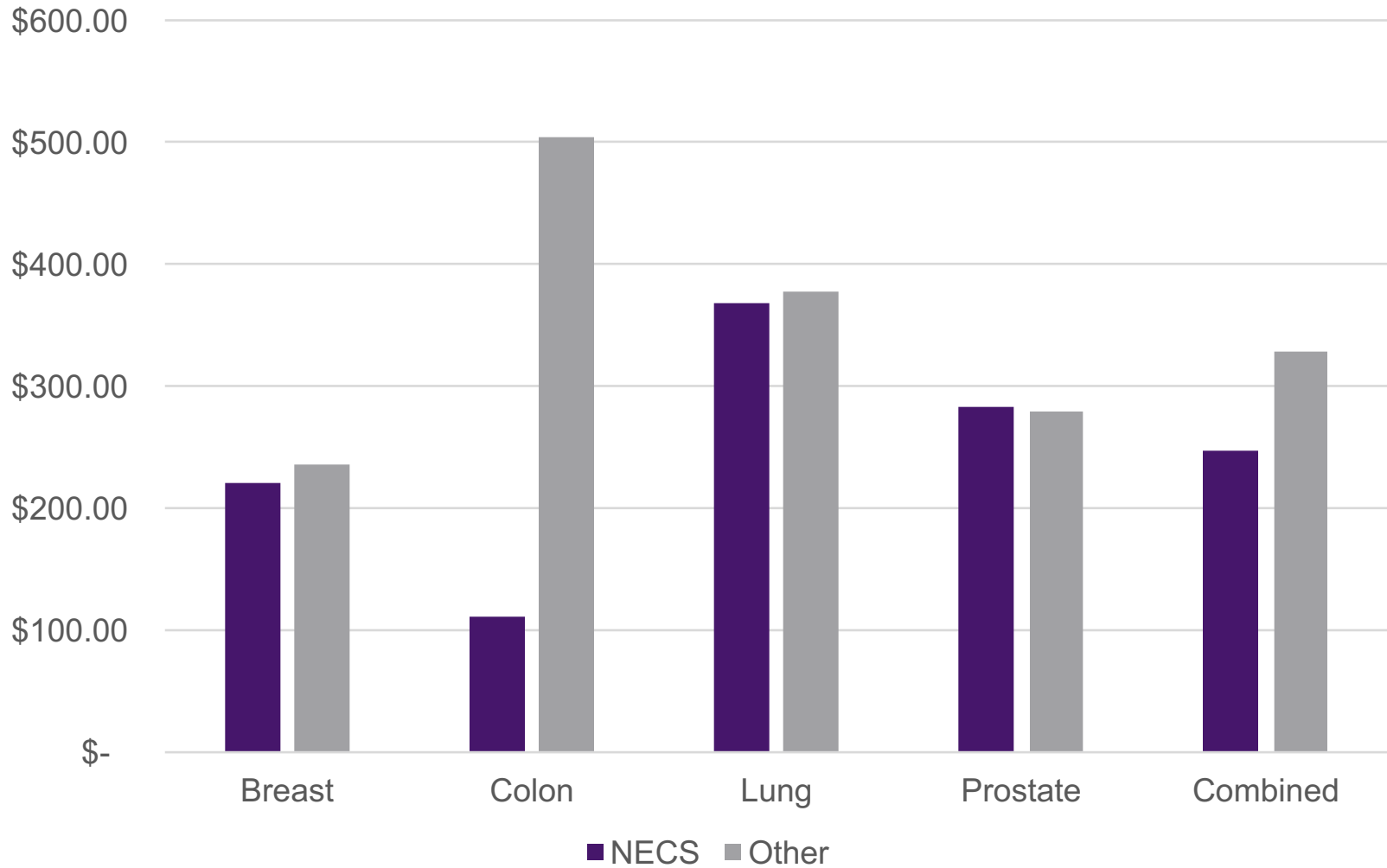


# Lung Cost/Program Month

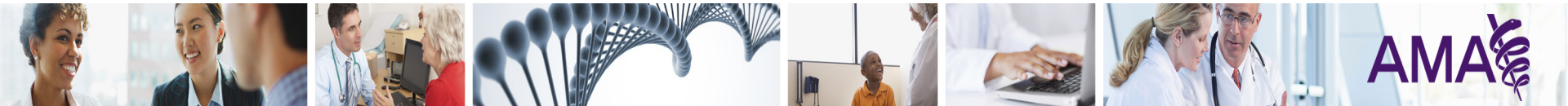
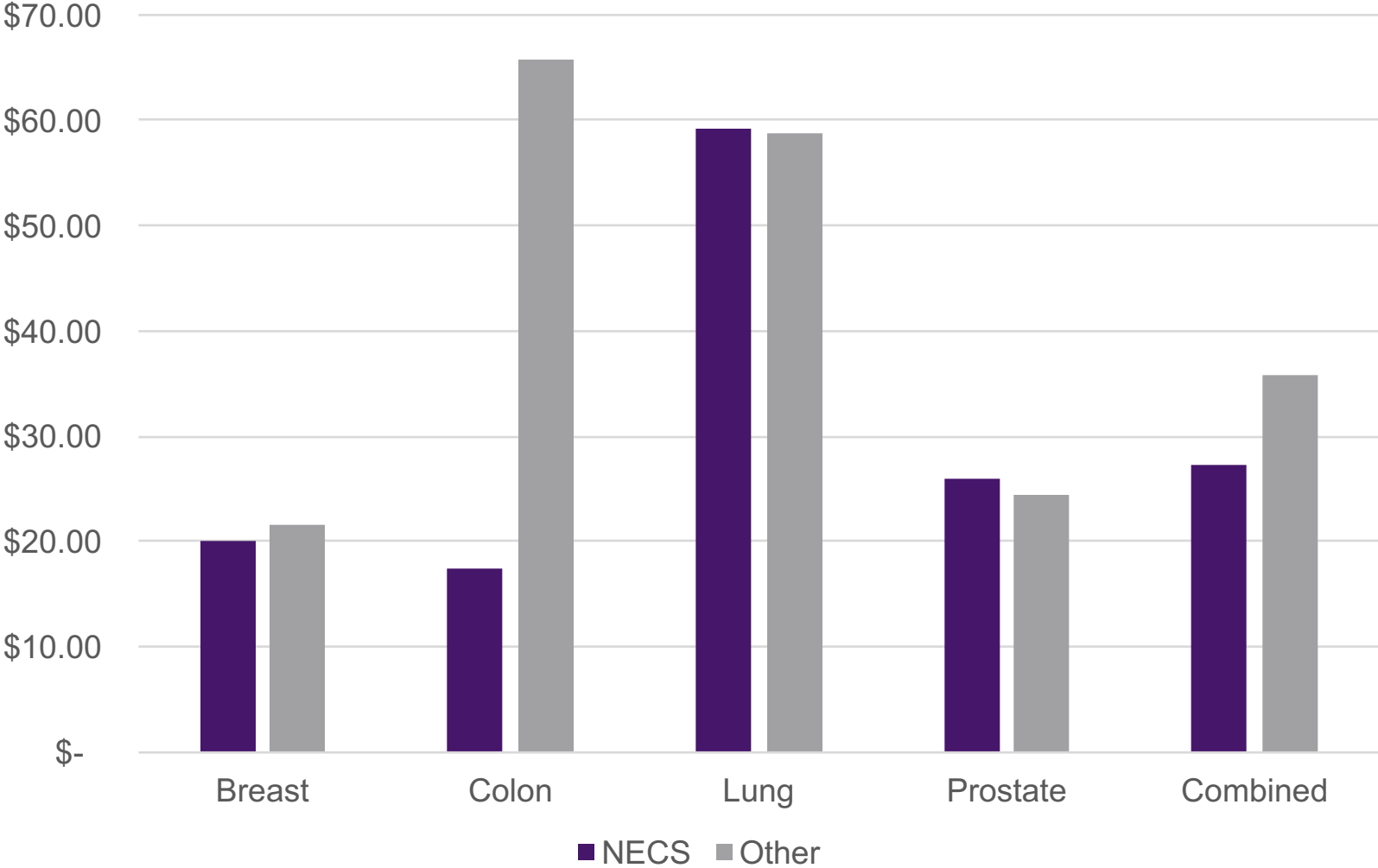




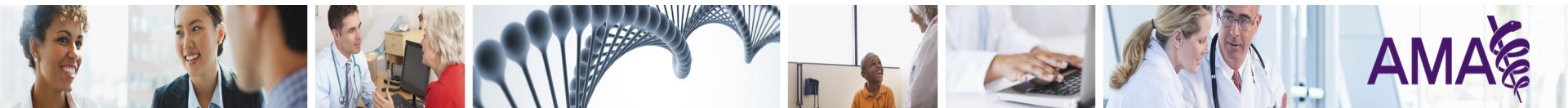
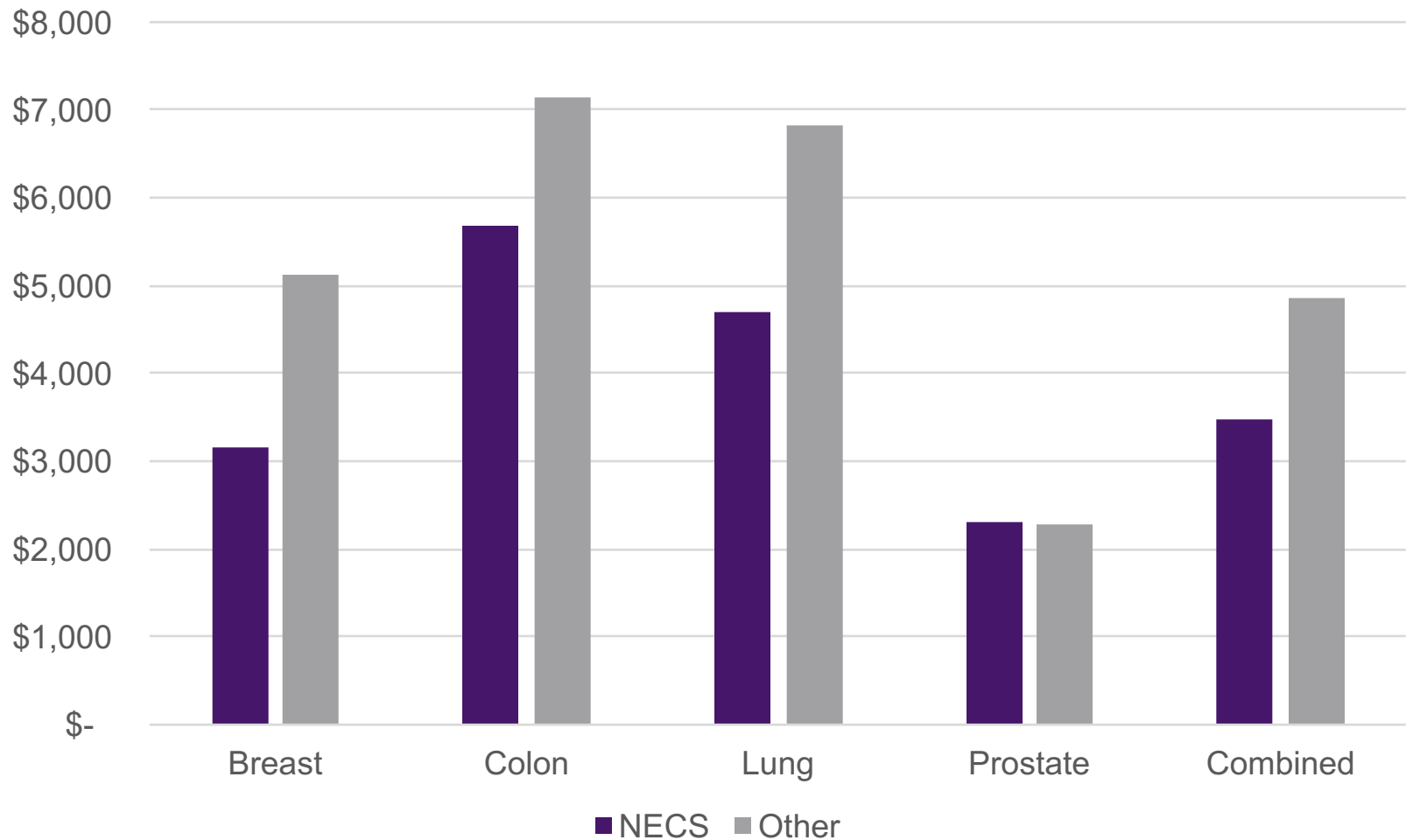
# ER Spend/Patient



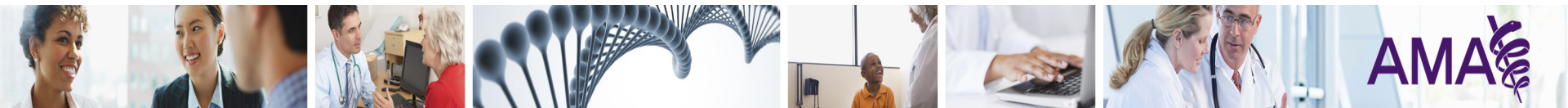
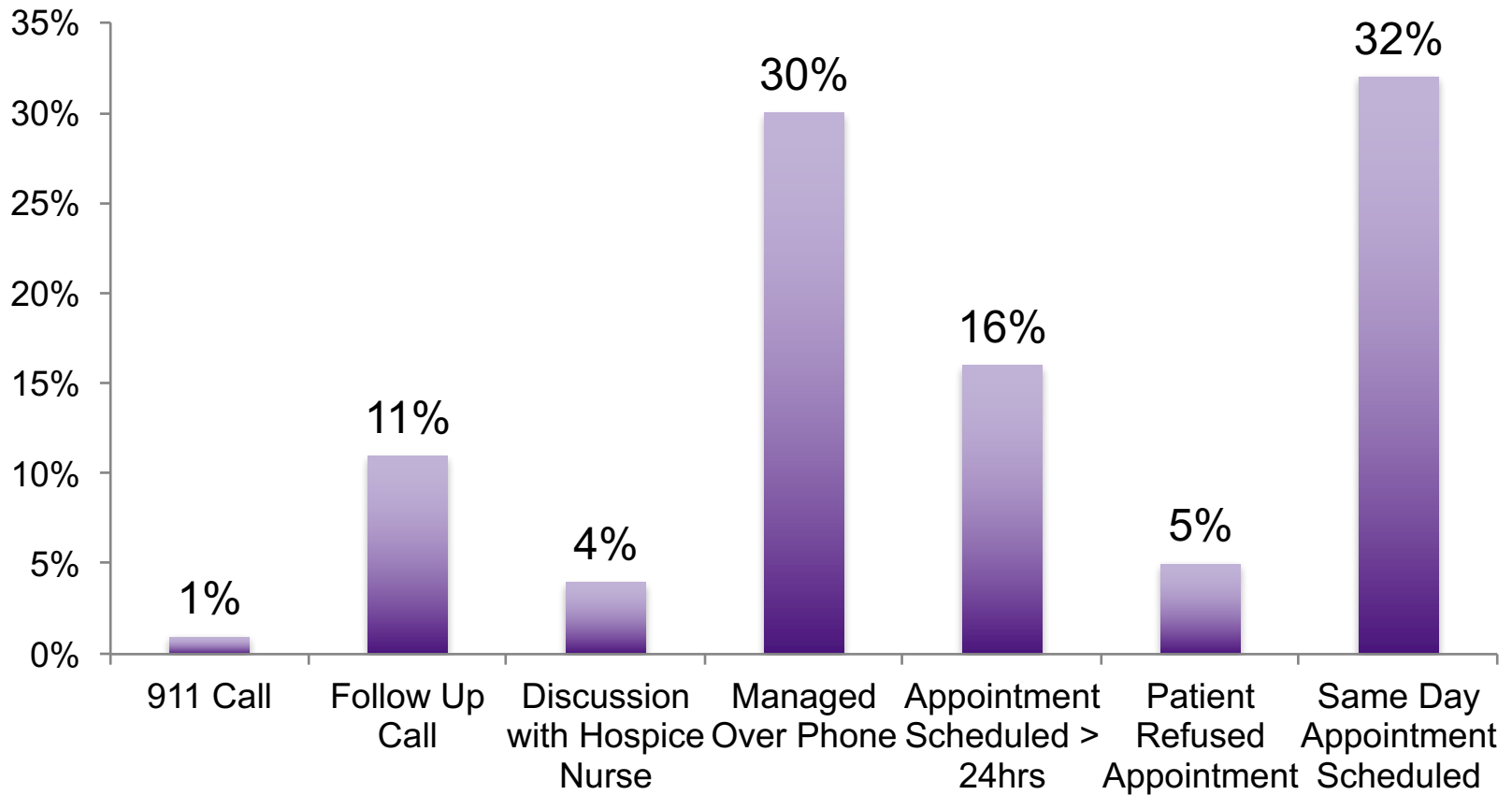
# ER Spend/Program Month



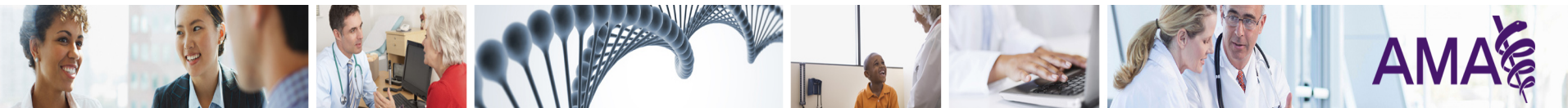
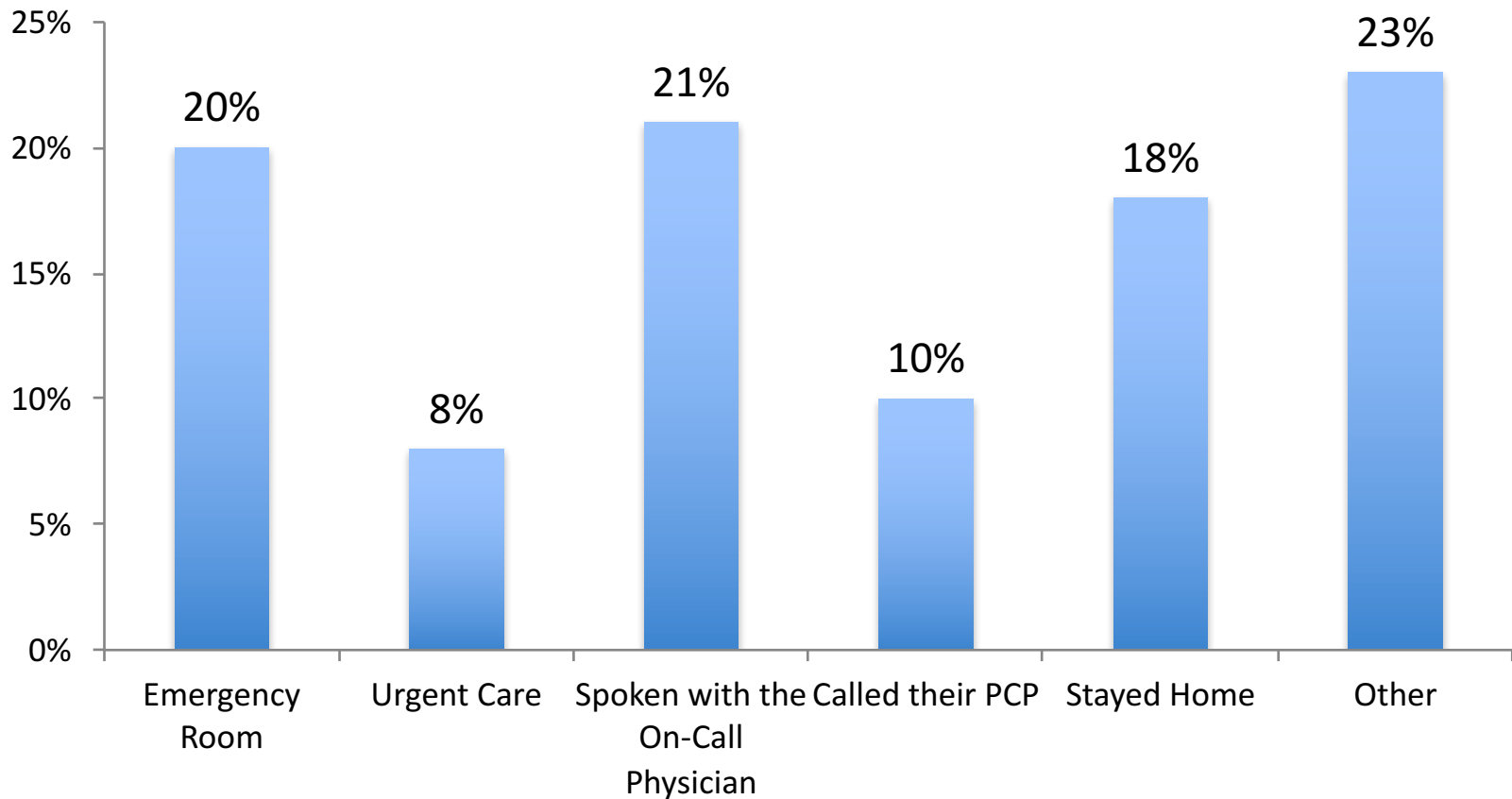
## Total of J-code drugs, infusion services, oral chemo, and other pharmacy claims/Active Month



# Triage Pathway Outcomes



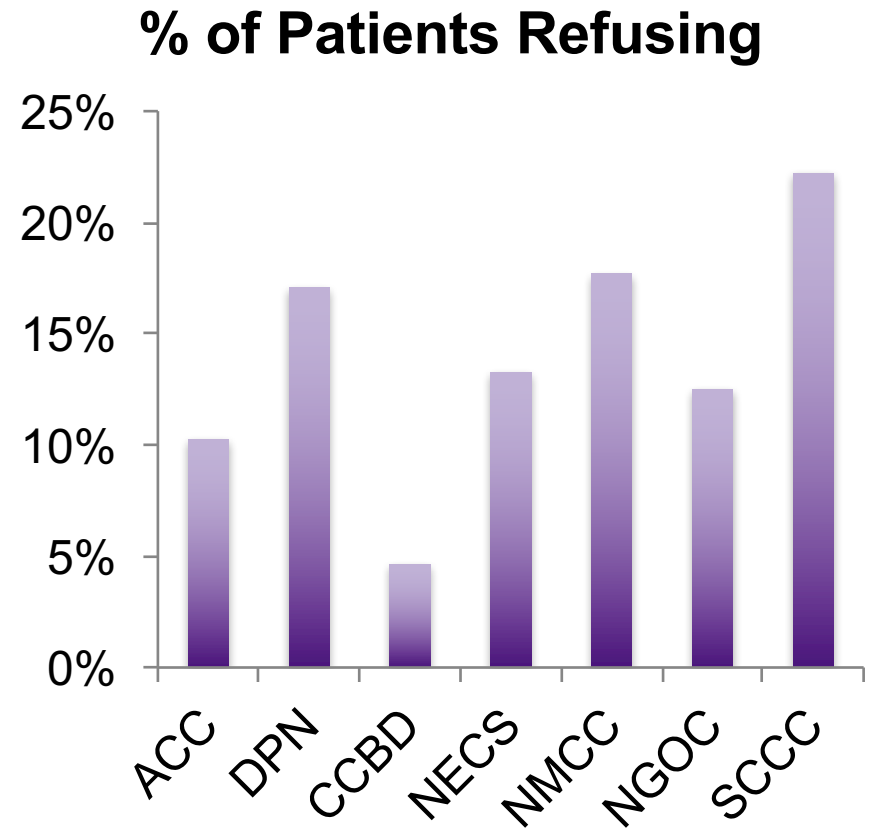
# Same Day Appointments: What would the patient have done if they could not be seen?





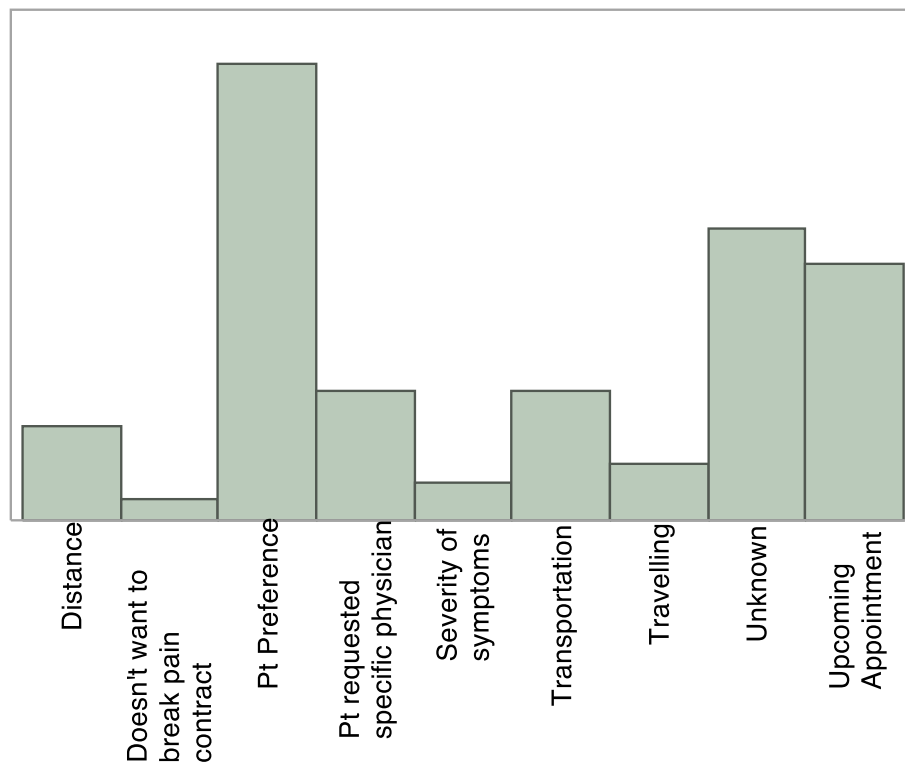
# % of Patients Refusing Triage Outcomes by Practice

Practice	Number of Triage Nursing Encounters	Number of Pt Refusals	% of Patients Refusing
ACC	39	4	10.26%
DPN	164	28	17.07%
CCBD	86	4	4.65%
MCCM	98	13	13.27%
NMCC	147	26	17.69%
NGOC	8	1	12.50%
SCCC	18	4	22.22%



# Patient Refusal Reasons

## Reason

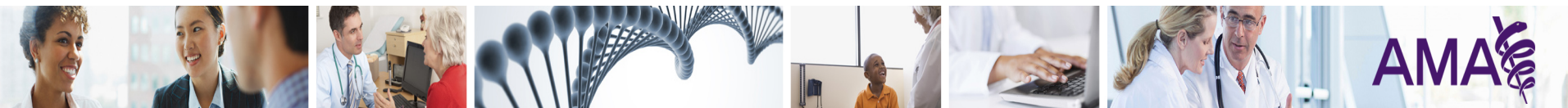


## Frequencies

Level	Count	Pro
Distance	5	0.0625
Doesn't want to break pain contrac	1	0.0125
Pt Preference	25	0.3125
Pt requested specific physician	7	0.0875
Severity of symptoms	2	0.0250
Transportation	7	0.0875
Travelling	3	0.0375
Unknown	16	0.2000
Upcoming Appointment	14	0.1750
Total	80	1.0000

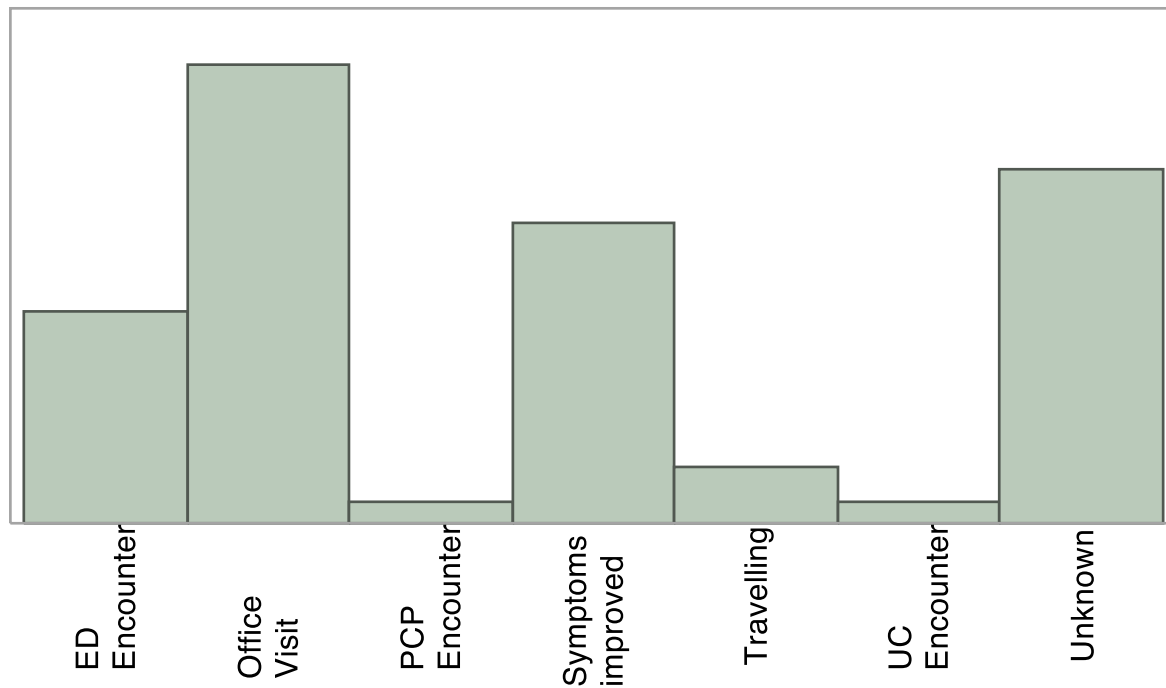
N Missing 0

9 Levels



# Patient Refusal Follow Up

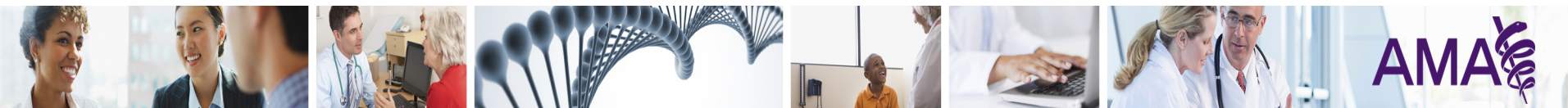
## What Happened



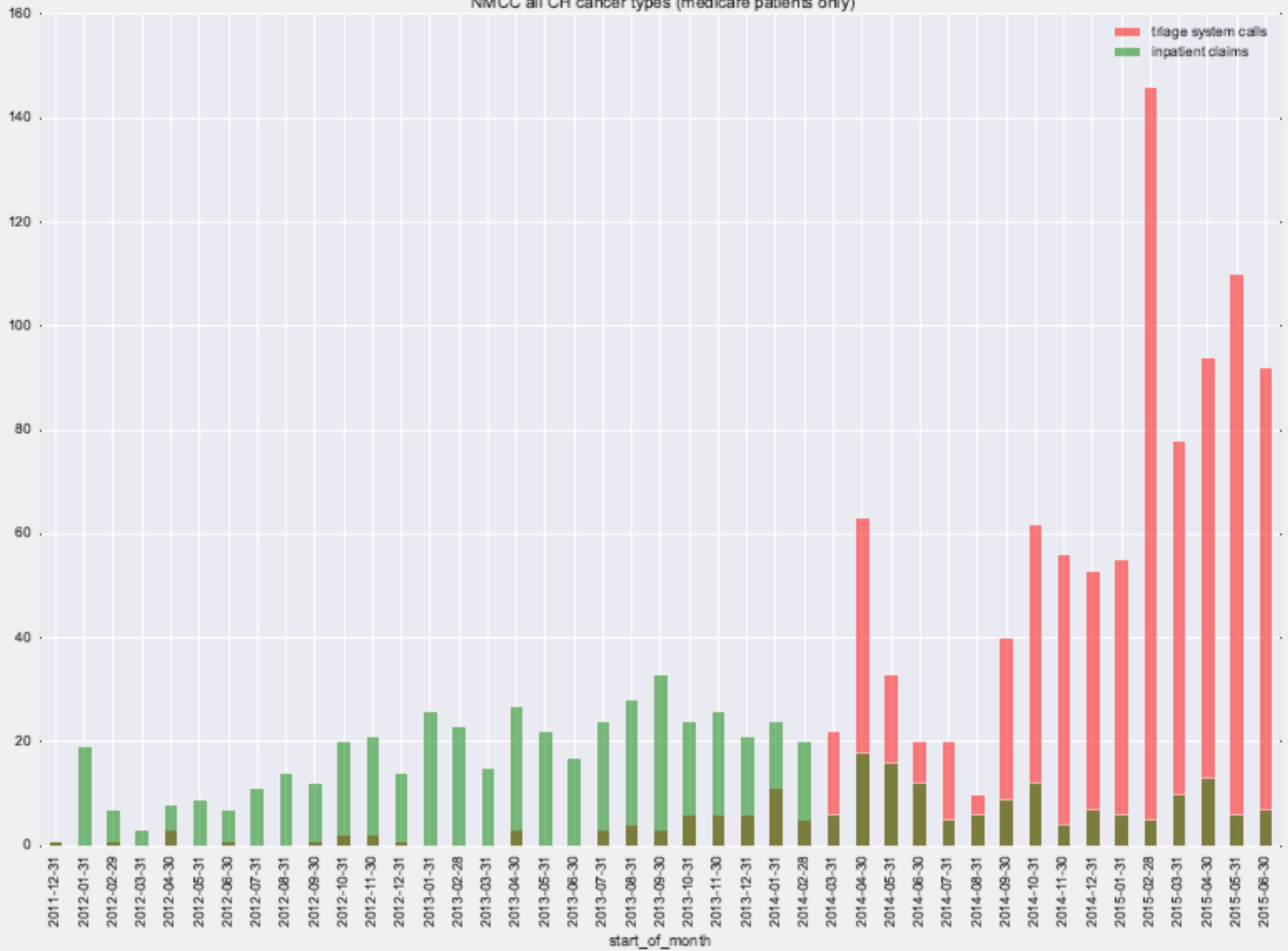
## Frequencies

Level	Count	Prob
ED Encounter	12	0.15000
Office Visit	26	0.32500
PCP Encounter	1	0.01250
Symptoms improve	17	0.21250
Travelling	3	0.03750
UC Encounter	1	0.01250
Unknown	20	0.25000
Total	80	1.00000

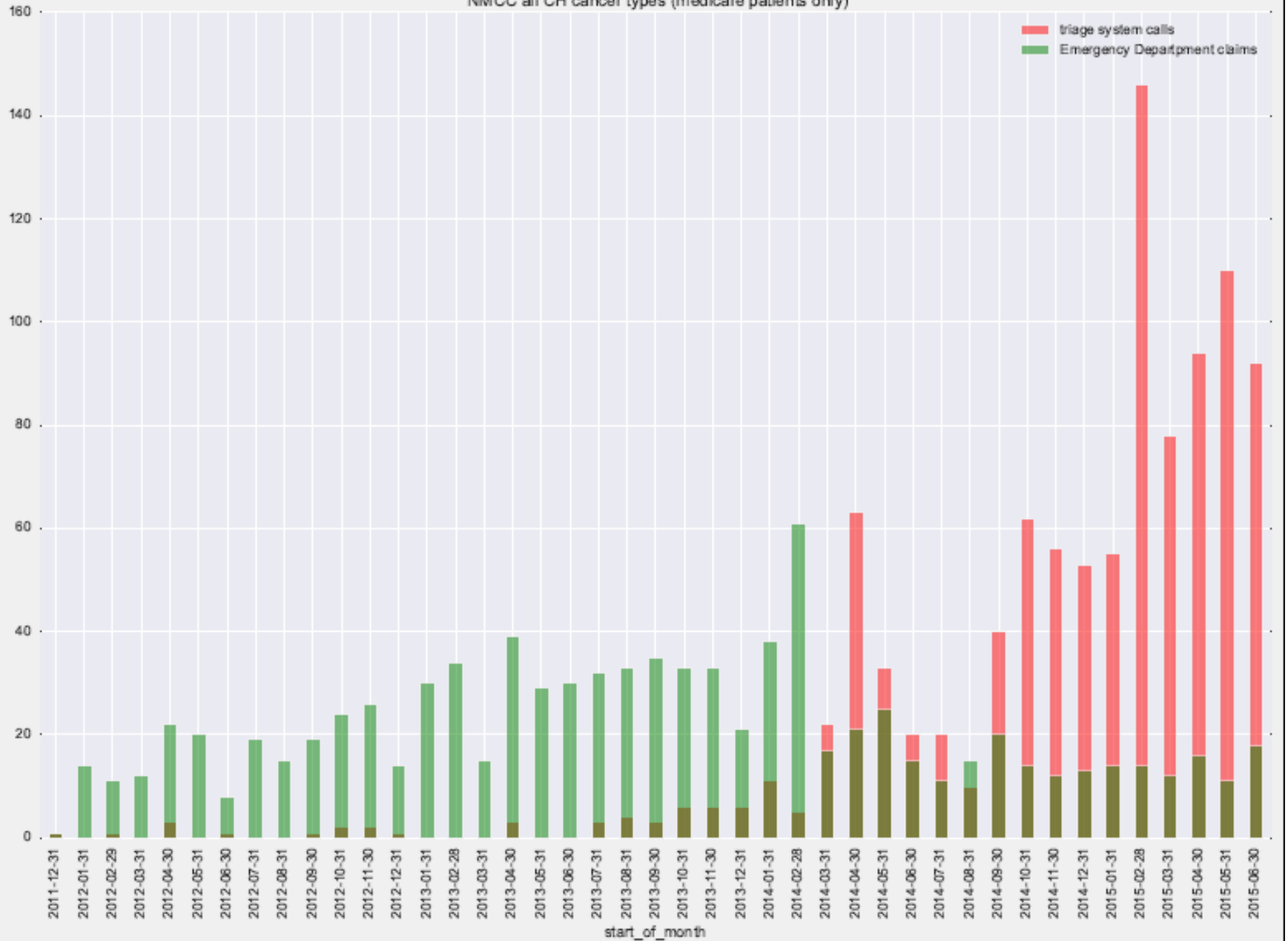
N Missing 0  
7 Levels



Inpatient claims per month  
 NMCC all CH cancer types (medicare patients only)

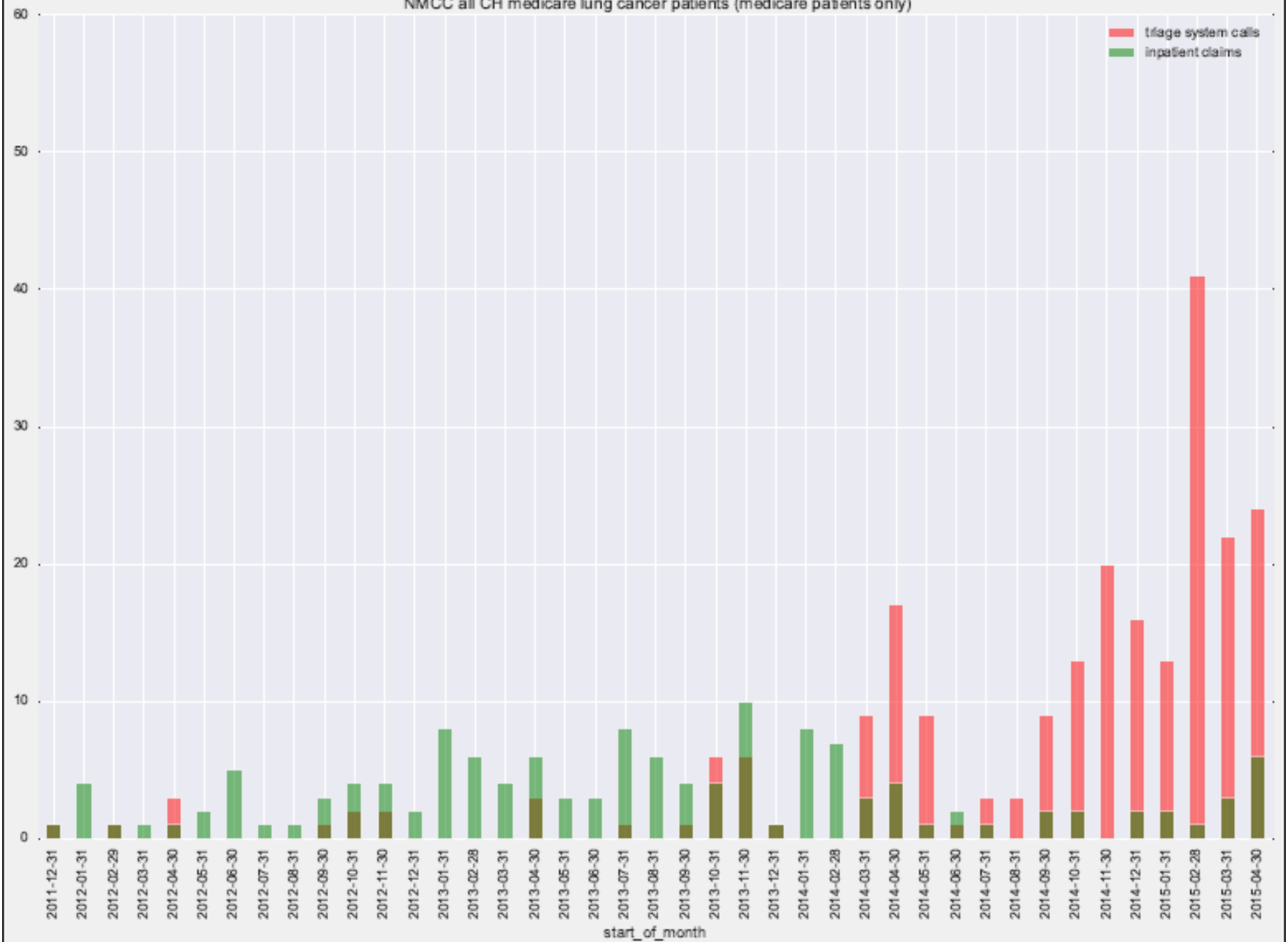


Emergency Department claims per month  
 NMCC all CH cancer types (medicare patients only)

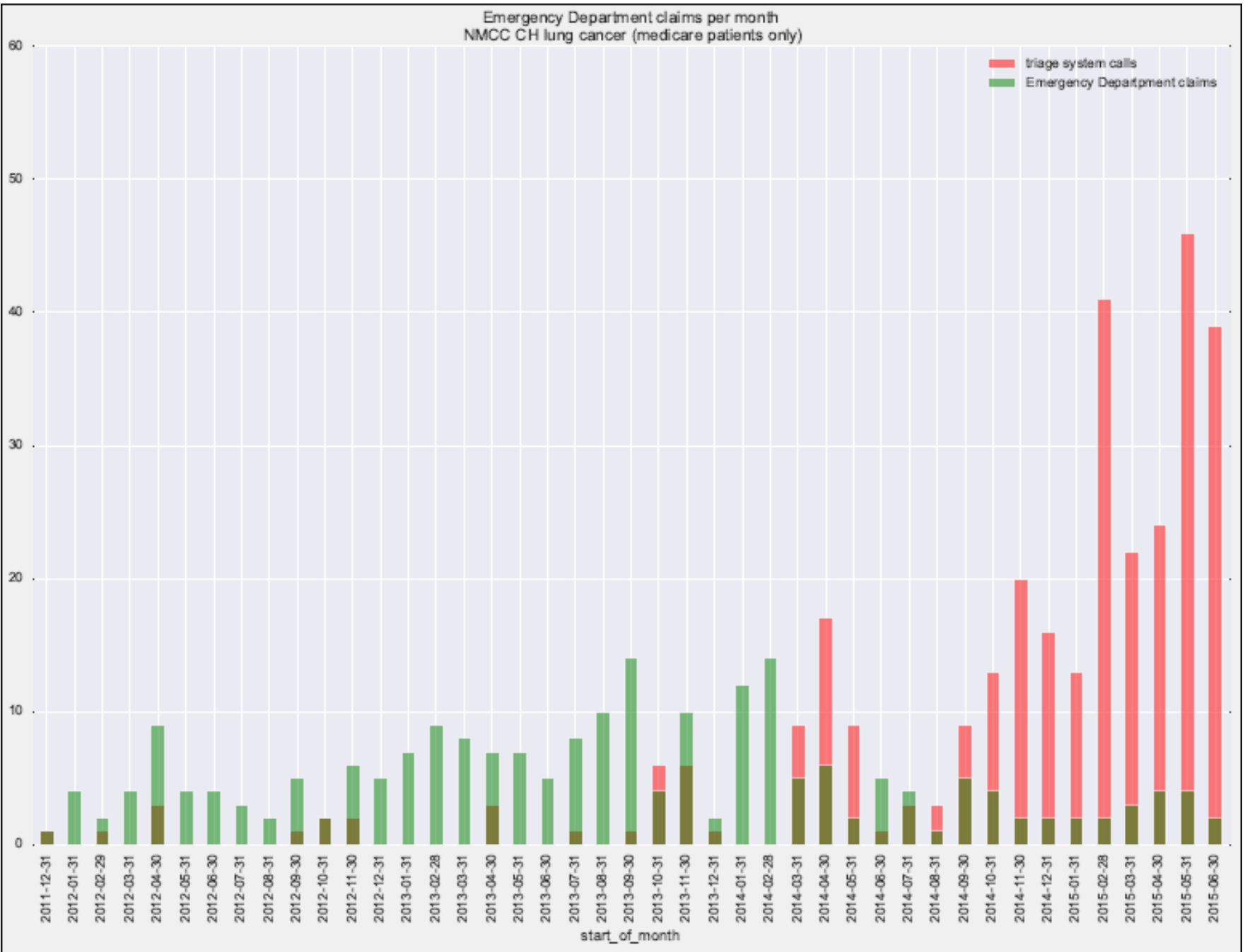




Inpatient claims per month  
 NMCC all CH medicare lung cancer patients (medicare patients only)

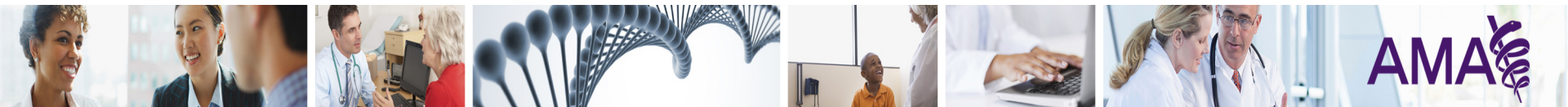


Emergency Department claims per month  
 NMCC CH lung cancer (medicare patients only)



# NATIONAL CANCER CARE ALLIANCE

- RESEARCH
  - COLLABORATION FOR IDEAS AND INNOVATION
  - EHR VENDOR NEGOTIATIONS
  - GROUP PURCHASING
  - NATIONAL CONTRACTS
  - DRUG PRICING
  - KEEPING INDEPENDENT PRACTICES INDEPENDENT
- 
- [www.nccalliance.org](http://www.nccalliance.org)



# SUMMARY: HOW TO GET PERSONALIZED CARE TO PATIENTS

- 1. DECISION SUPPORT
- 2. PRIOR AUTHORIZATION REFORM
- 3. EQUALIZATION OF SITE OF SERVICE PAYMENT
- 4. DRUG PRICING
- 5. MEDICAL HOME PROCESSES
- 6. PAYMENT REFORM

