

Findings from Recent CMS Research on Medicare

Chair: Niall Brennan

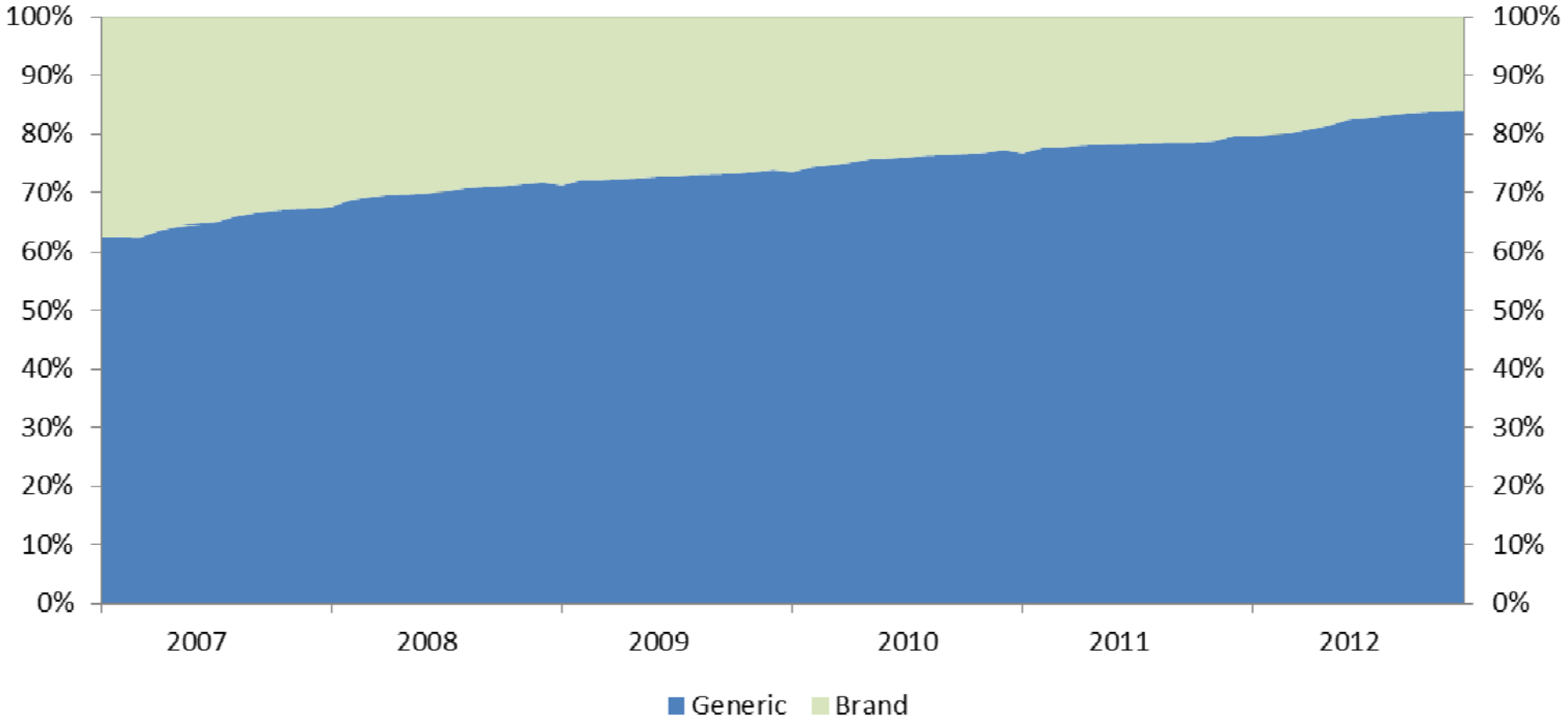


Patent Expirations and Part D Spending on Atypical Antipsychotic Medications

Eric Rollins
Director, Policy & Data Analytics Group
Office of Information Products and Data Analytics

Use of Generic Drugs in Part D, 2007-2012

- The share of total prescriptions filled with generics rose from 63% in January 2007 to 84% in December 2012



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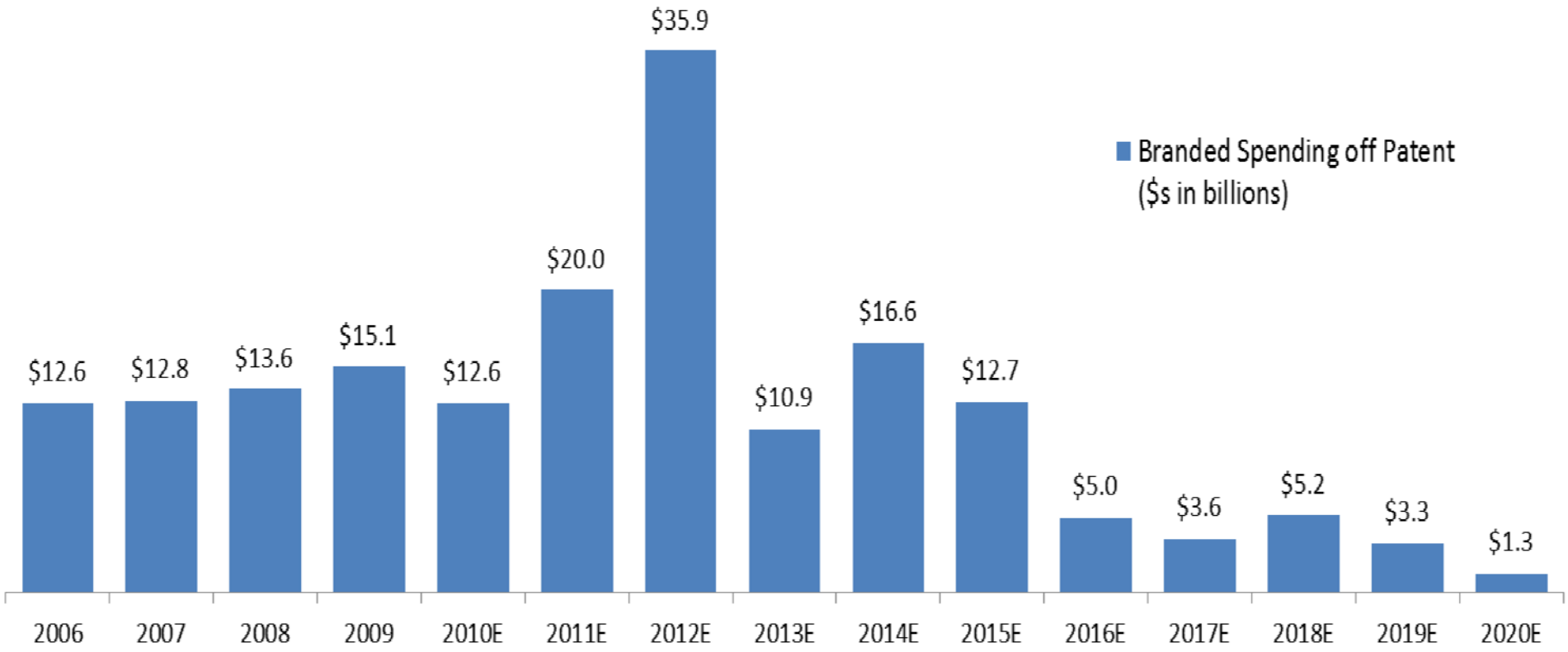
Brand-Name Drugs Losing Patent Protection

- These figures are based on total U.S. sales



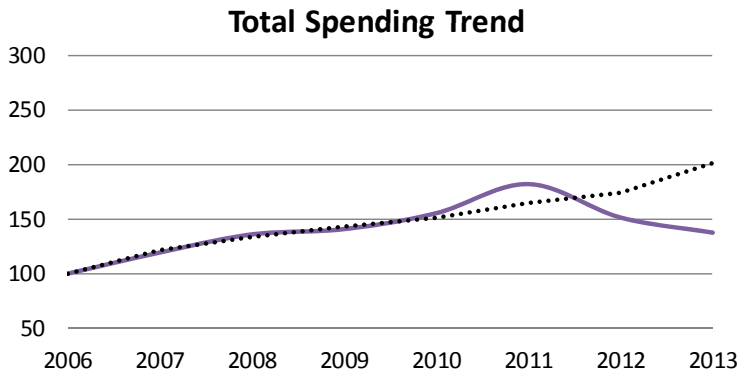
Source: IMS, CVS Caremark, Barclays Research

Part D Spending for Atypical Antipsychotics

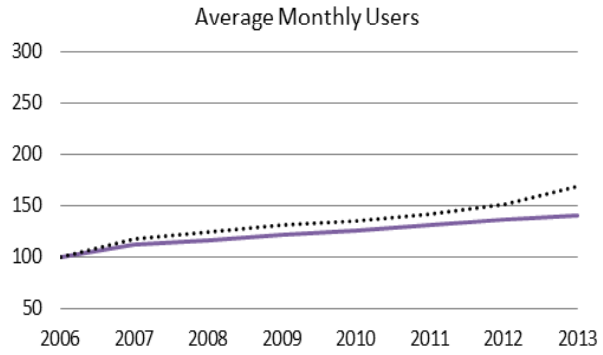
ANTIPSYCHOTICS/ANTIMANIC AGENTS

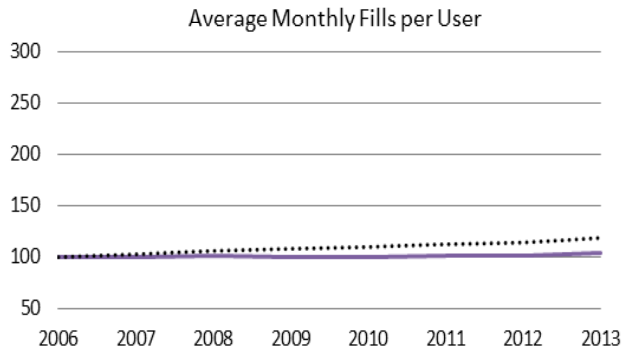
2013 Spend (%)
2013 Fills (%)

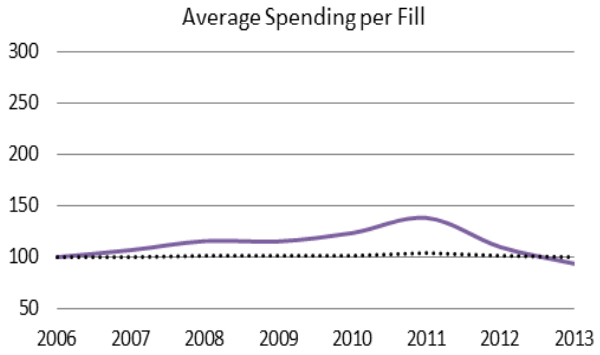
$5.8 B (6%)
29.8 M (2%)



Year	Spending (in $ billions)	Percent Increase	Share of all Part D spending
2006	$4.2		8.1%
2007	$4.9	19.3%	7.9%
2008	$5.7	15.5%	8.3%
2009	$5.9	3.6%	8.0%
2010	$6.5	10.4%	8.3%
2011	$7.6	17.3%	9.0%
2012	$6.4	-16.8%	7.1%
2013	$5.8	-9.1%	5.6%







All Drugs — Selected Drug Group

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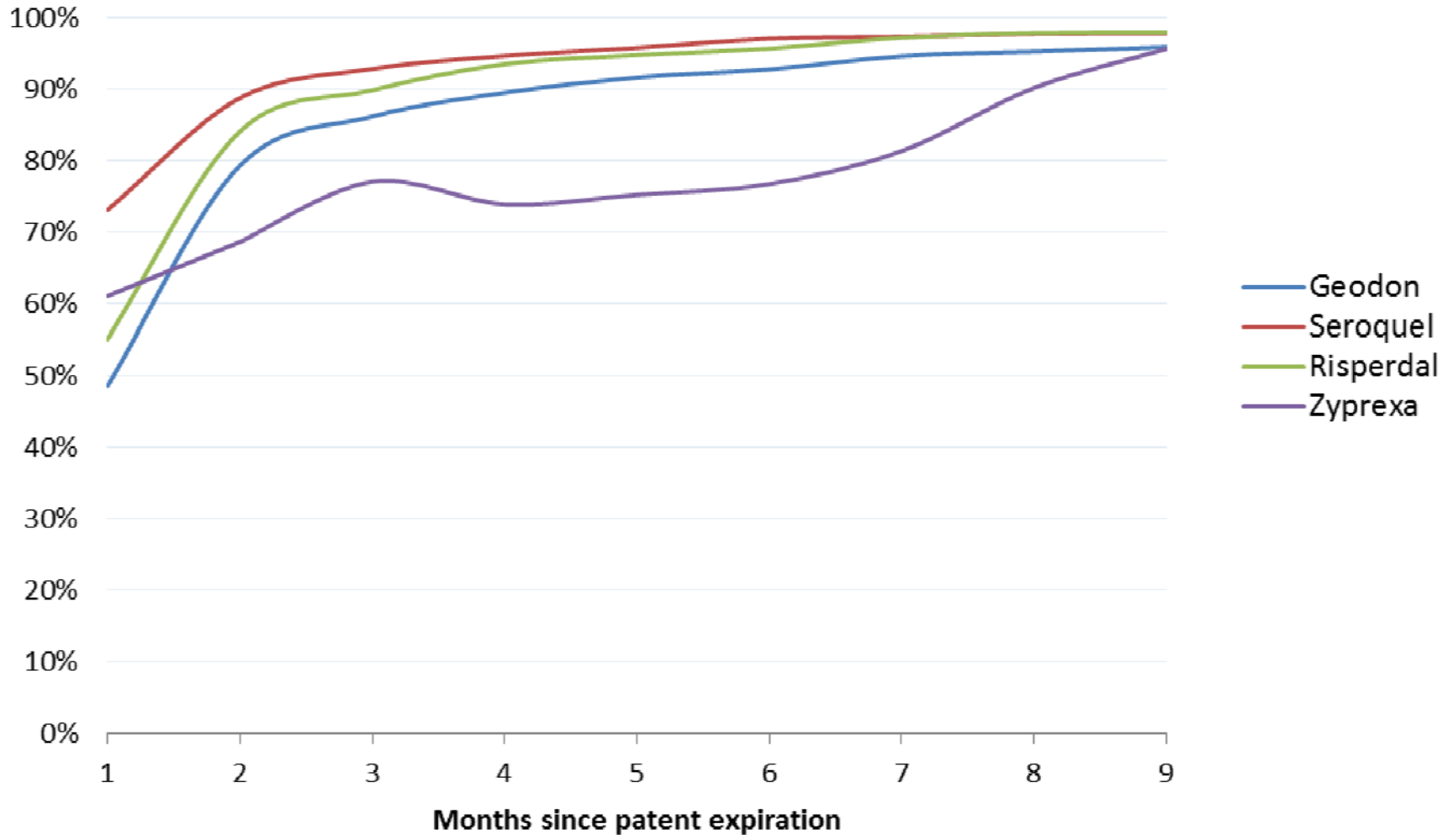
Major Atypical Antipsychotics: Patent Expiration Dates and Part D Market Shares

Drug	Generic Name	Patent Expiration *	Forms Affected	Percentage of 2011 Fills	Percentage of 2011 Spend
Clozaril	Clozapine	30-Aug-96	Tablet	5.2	1.7
Risperdal	Risperdone	30-Jun-08	Tablet	25.6	6.5
Zyprexa	Olanzapine	24-Oct-11	Tablet	14.3	26.2
Geodon	Ziprasidone	02-Mar-12	Capsule	5.5	7.1
Seroquel	Quetiapine Fumarate	26-Mar-12	Tablet	34	32.3
Abilify	Aripiprazole	Apr-15	Tablet	12.1	19.7
Total	N/A	N/A	N/A	96.7	93.5

* This is the expiration date for the patent on the leading dosage form, as reported by the FDA Orange Book; the date for Abilify comes from Express Scripts/Medco's file of anticipated patent expiration dates, accessed on April 1, 2013.

Generics as a Share of Total Prescriptions, by Drug, by Months after Patent Expiration

(Here month 1 is the month when the patent expired.)



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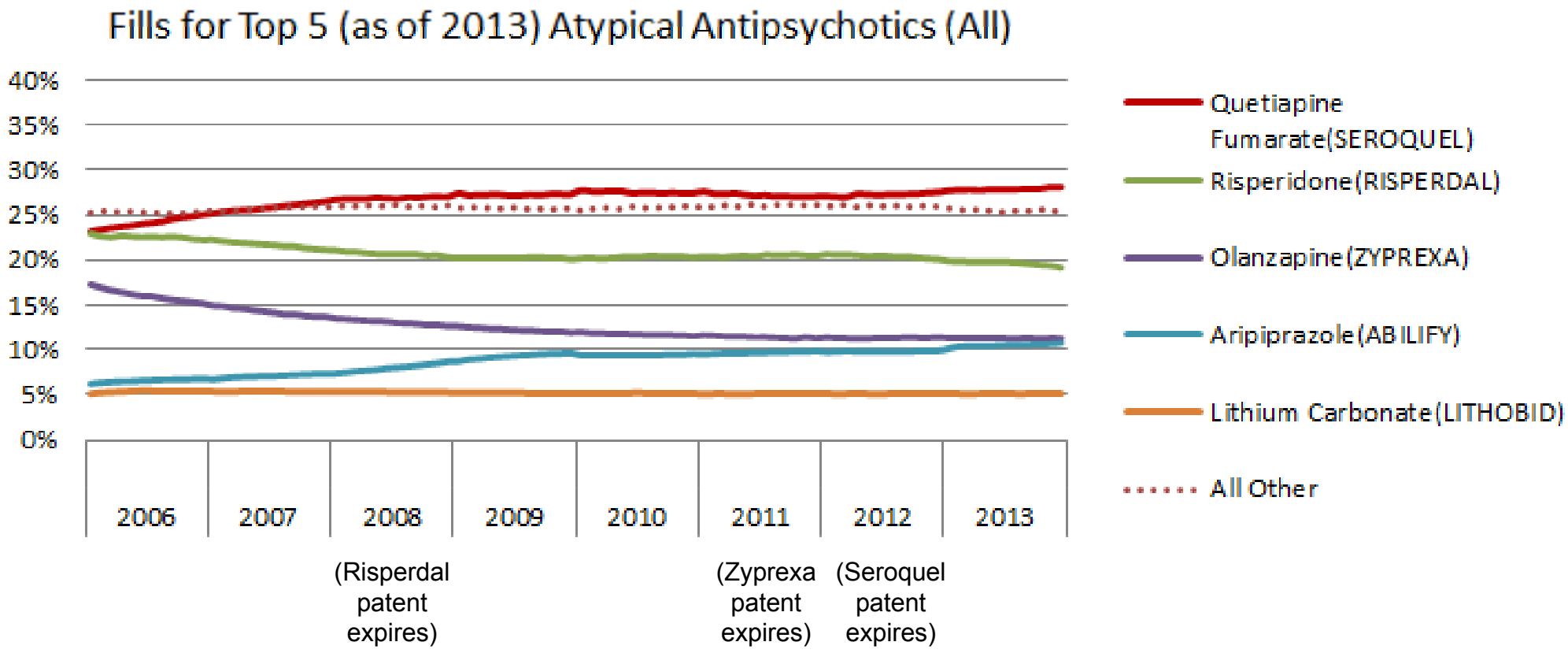
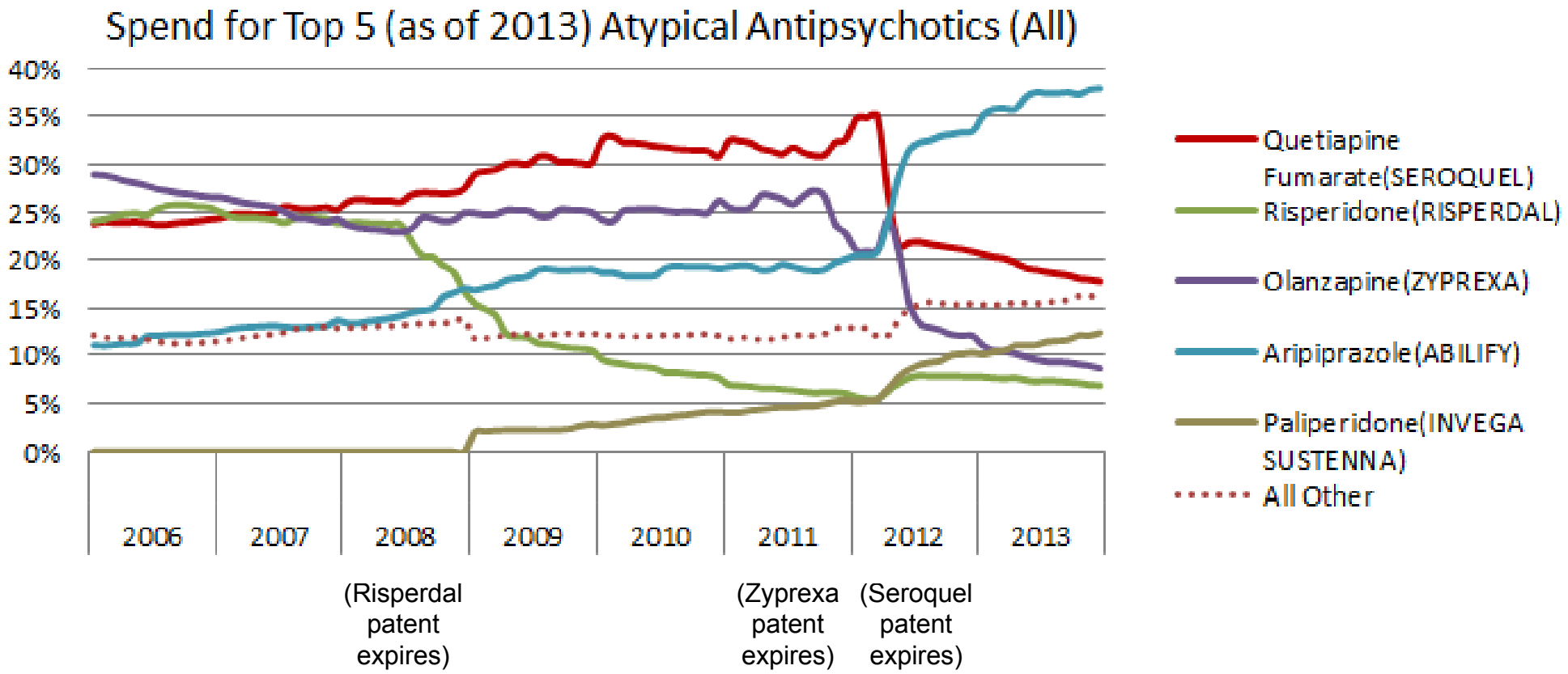
Part D Market Shares, by Prescriptions, 2006-2013

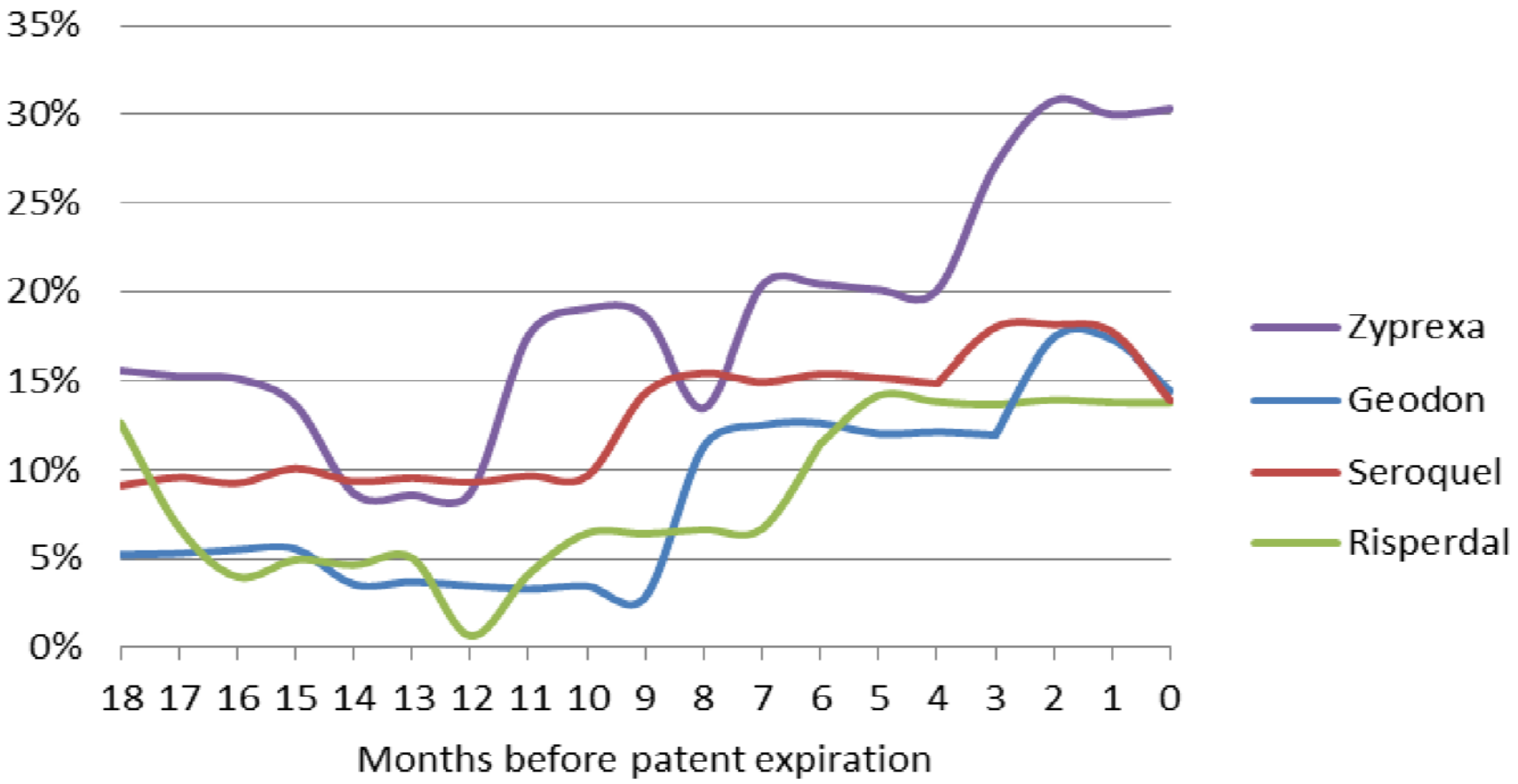


Part D Market Shares, by Spending, 2006-2013



Year-over-Year Monthly Growth Rates in Average Spending per Prescription

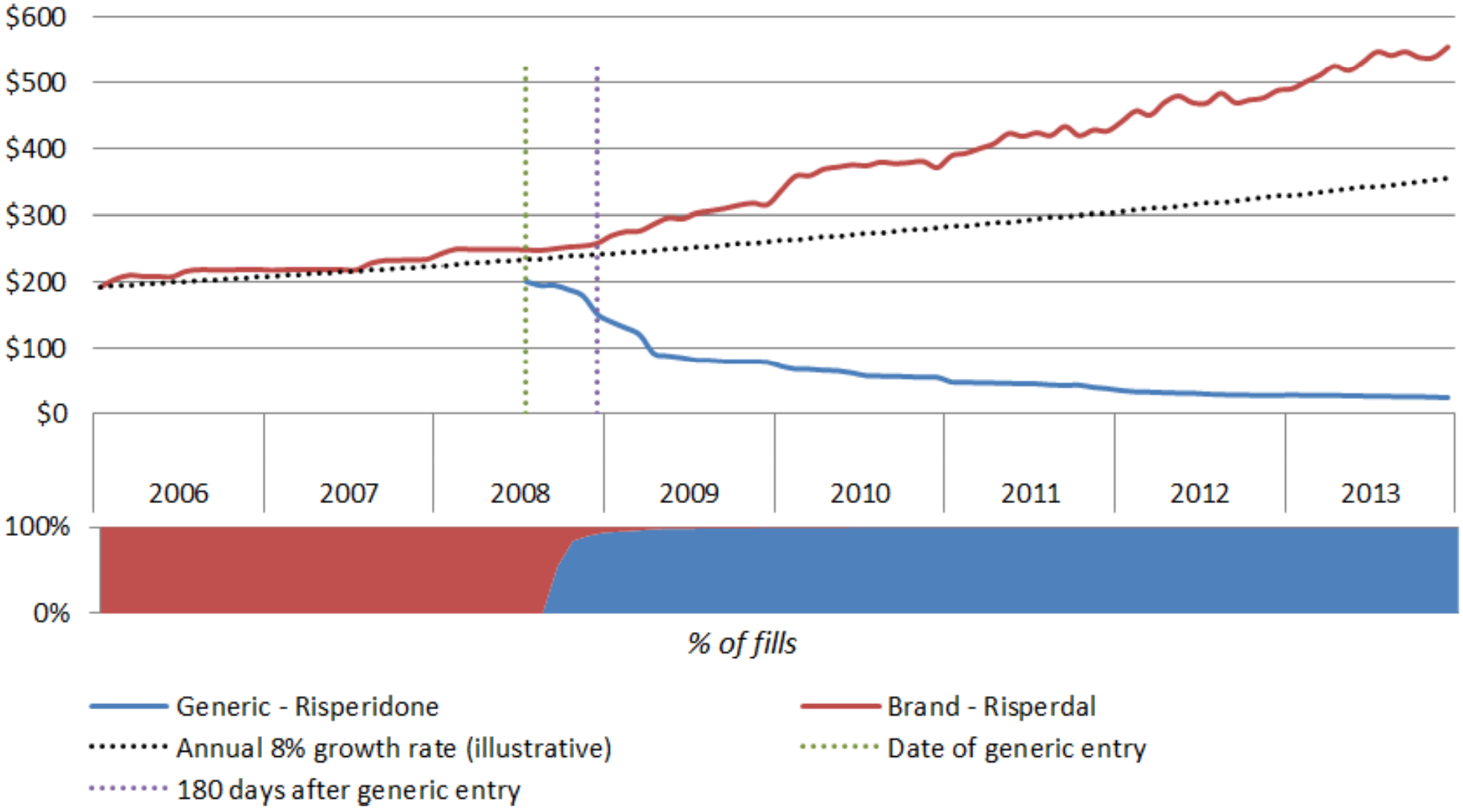
(Here month 0 is the month when the patent expired)



Risperdal (Risperidone) 30-Day Prescription Average Cost

2013 Total Spending: $149 M

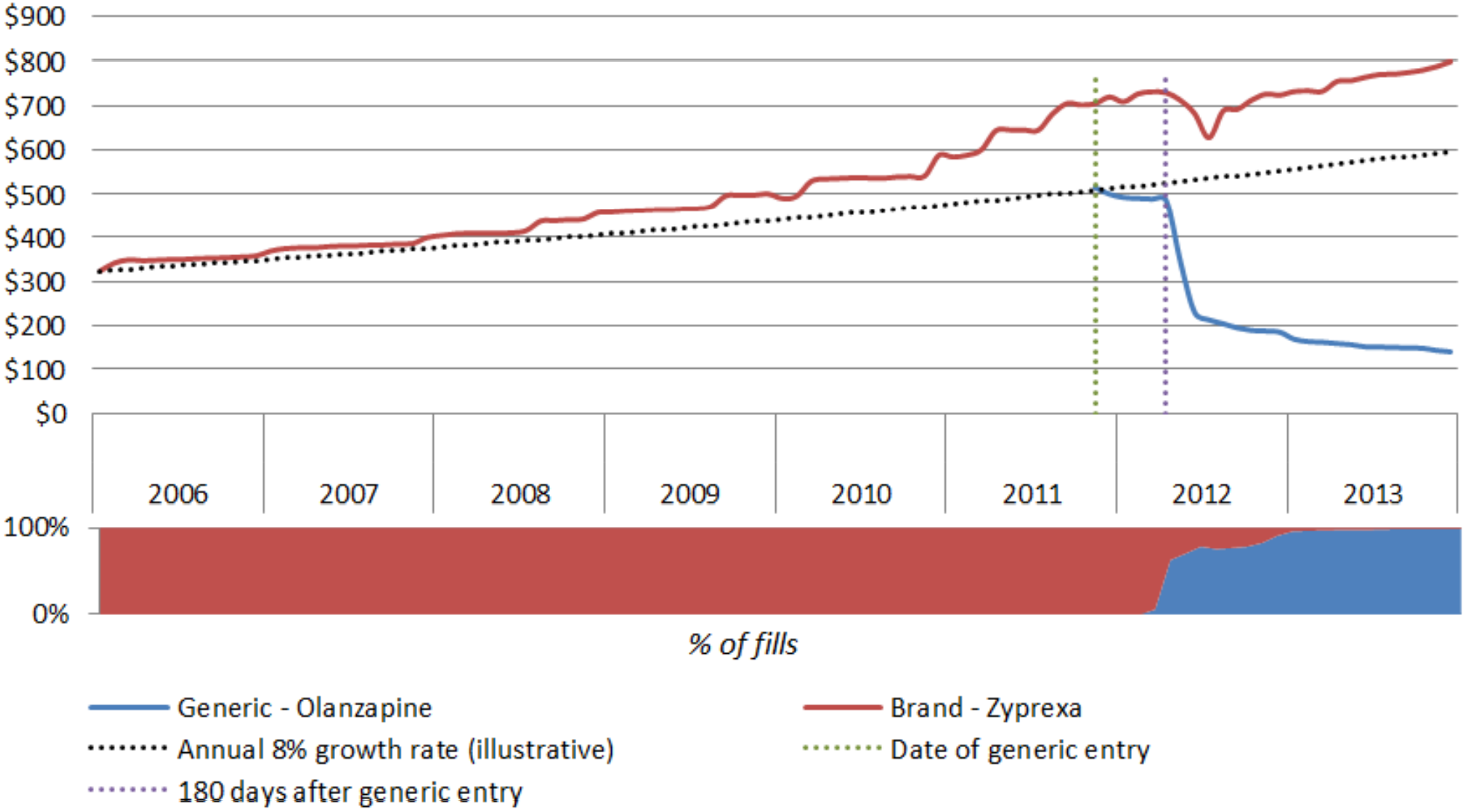
(Generic equivalent available on 06/30/2008)



Zyprexa (Olanzapine) 30-Day Prescription Average Cost

2013 Total Spending: $545 M

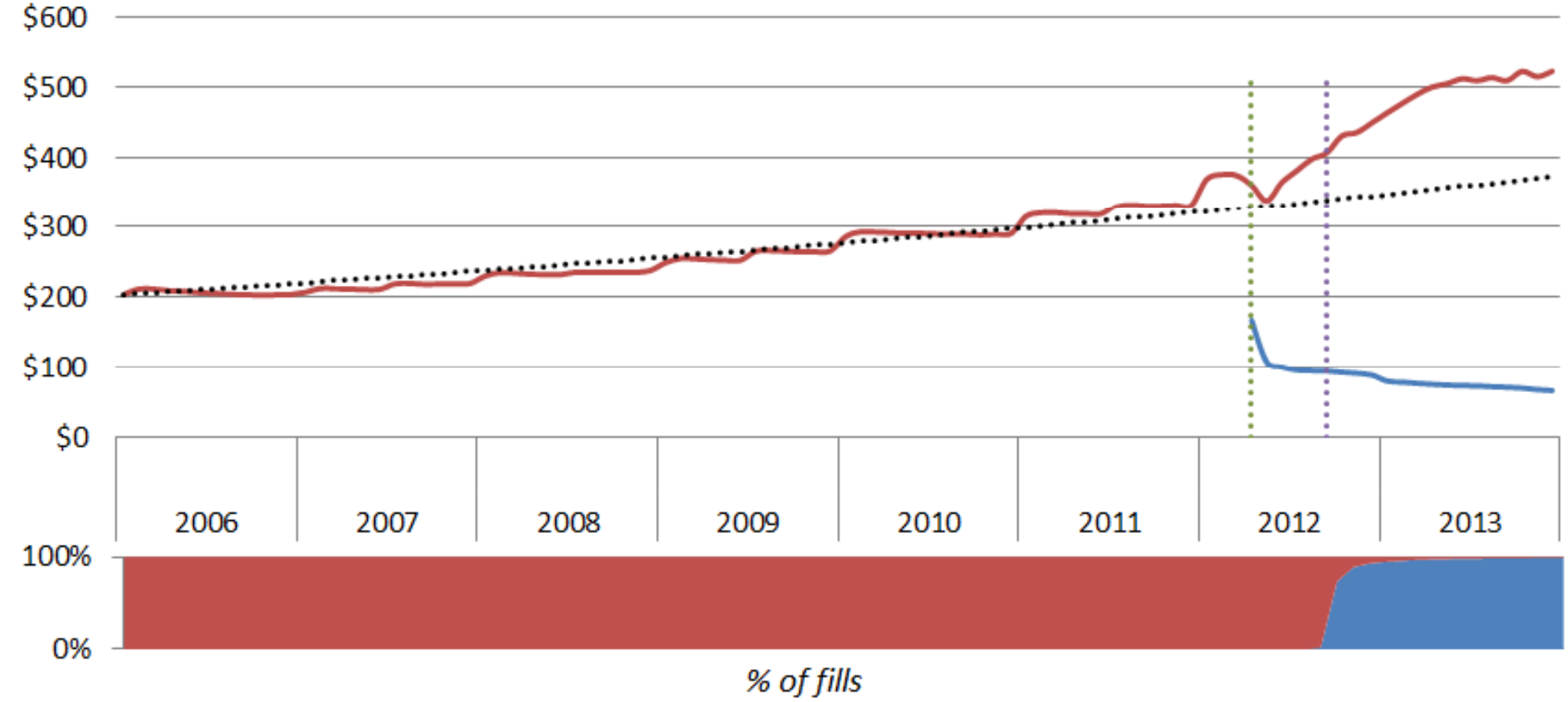
(Generic equivalent available on 10/24/2011)



Seroquel (Quetiapine Fumarate) 30-Day Prescription Average Cost

2013 Total Spending: $556 M

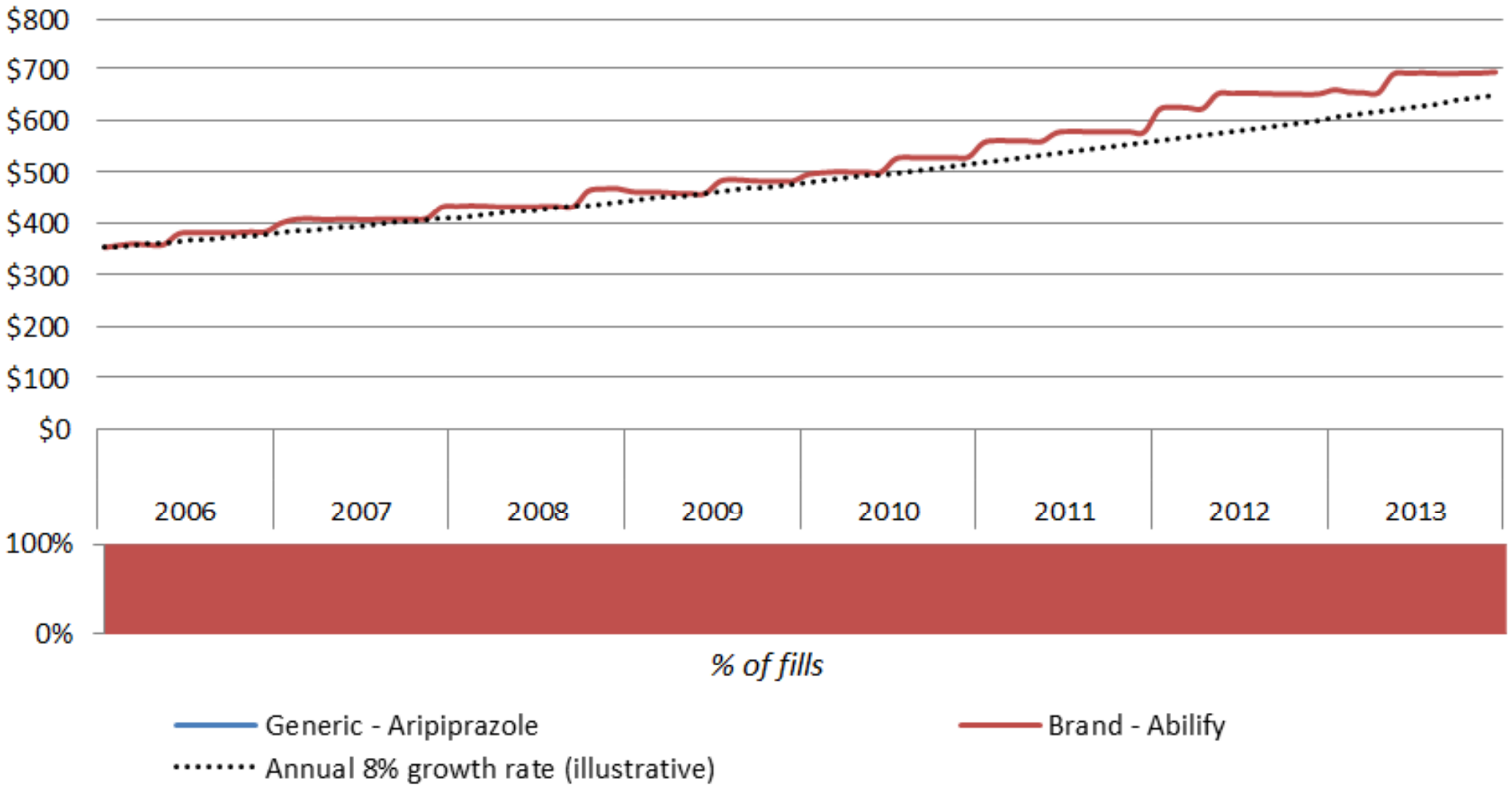
(Generic equivalent available on 03/26/2012)



Abilify (Aripiprazole) 30-Day Prescription Average Cost

2013 Total Spending: $2.1 B

(Generic equivalent available on 04/01/2015)



Key Findings

- Rapid generic substitution (80-90% within 2 months of patent expiration and ~95% within 9 months), but limited therapeutic substitution within the drug class
- Savings in first 180 days after patent expiration were relatively limited for two drugs
  - The average cost of the brand-name drug increased rapidly leading up to patent expiration
  - When a single generic manufacturer held the market exclusivity rights for the first 180 days after patent expiration, the average cost of the generic was similar to the brand-name cost 12-24 months prior
- The average cost of generic prescriptions declined sharply after the 180-day period, but full extent of savings may take years to appear

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Use of Post-Acute Care Following a Hip or Knee Replacement (DRG 470)

Allison Oelschlaeger
Office of Information Products and Data Analytics

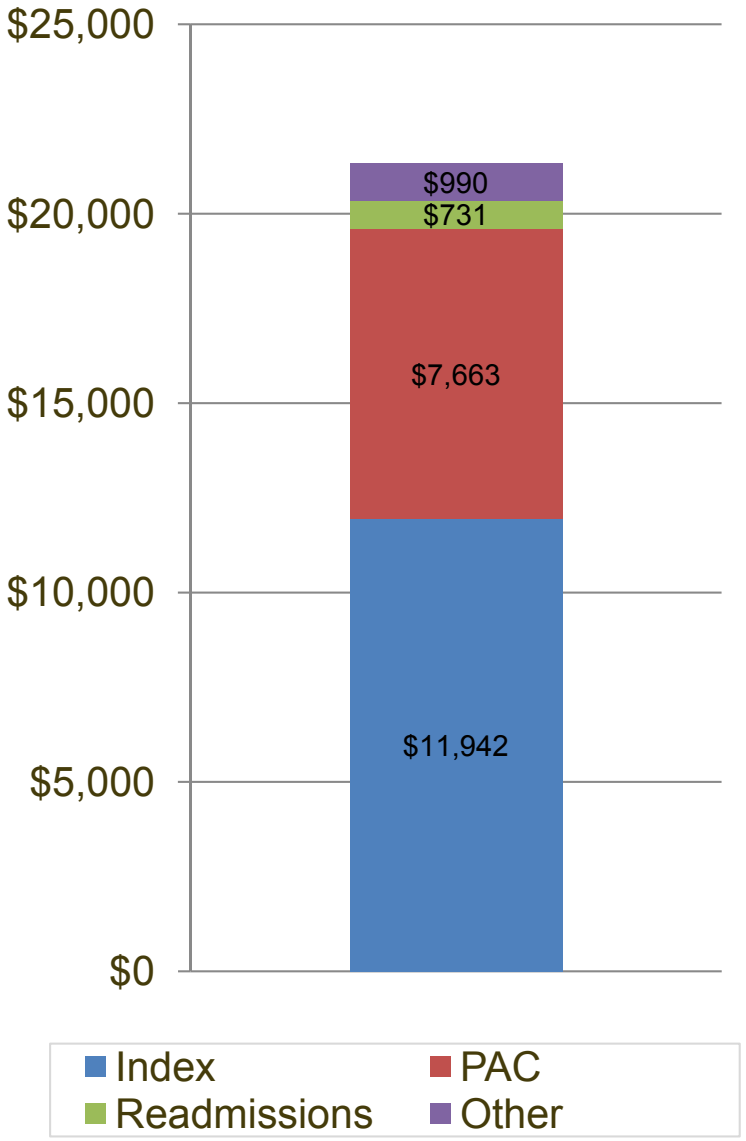
Episode Construction

- Episodes started with an index hospitalization that occurred in CY 2010
  - Initial episodes had to be preceded by a 30-day clean period, during which the beneficiary received no acute or post-acute care services
- Episodes ended "naturally" with either a clean period (20 days) or admission for certain surgical MS-DRGs
- PAC defined as use of home health, SNF, IRF, LTCH, or Part B outpatient therapy (hospital outpatient therapy services and therapy claims delivered by independent therapists)

MS-DRG 470: Profile

- Total Episodes = 285,520

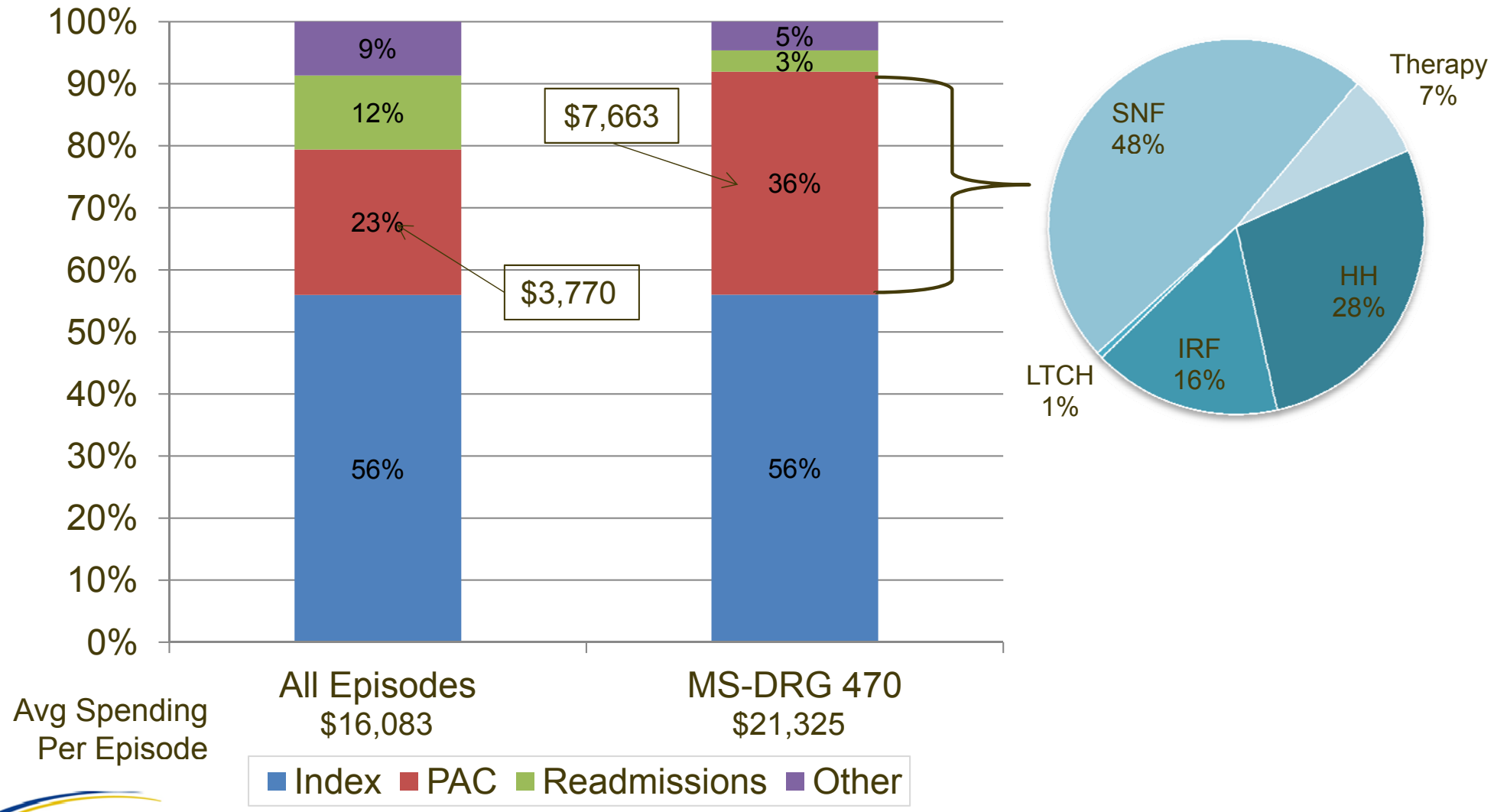
  (Total discharges for DRG 470 = 437,981)
- Total Spending = $6.1 B
- Average episode cost = $21,317
- Average episode length = 56 days
- Beneficiaries:
  - Survived the index admit in 99.9% of episodes (285,242)
  - Survived the index and used PAC as the first service after the index in 92.3% of episodes (263,507)
- Readmissions per episode = 0.09



All figures based on standardized dollars

Distribution of Spending

PAC is a much larger share of episode spending for MS-DRG 470



Limited to episodes where the beneficiary survived the index admit

Distribution of Episodes by First/Second Service Used after Discharge

1st Service After Index		*2nd Service After Index*						
Service	**% of Total**	**None**	**Therapy**	**HHA**	**SNF**	**IRF**	**LTCH**	**Acute Admit**
None	*7.1%*	7.1%	--	--	--	--	--	--
Therapy	*11.4%*	**10.8%**	--	0.1%	*	*	--	0.4%
HHA	*35.2%*	**15.1%**	**18.7%**	--	0.1%	*	*	1.2%
SNF	*36.3%*	5.0%	**9.1%**	**18.9%**	0.9%	0.1%	*	2.4%
IRF	*9.5%*	0.8%	2.4%	5.2%	0.7%	*	*	0.4%
LTCH	*	*	*	*	*	*	--	*
Acute Admit	*0.5%*	0.2%	0.1%	0.1%	0.1%	*	*	*
	100.0%	*39.0%*	*30.3%*	*24.3%*	*1.8%*	*0.1%*	*	*4.4%*

Episodes that accounted for less than 0.1% of the total are marked with an asterisk

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Limited to episodes where the beneficiary survived the index admit

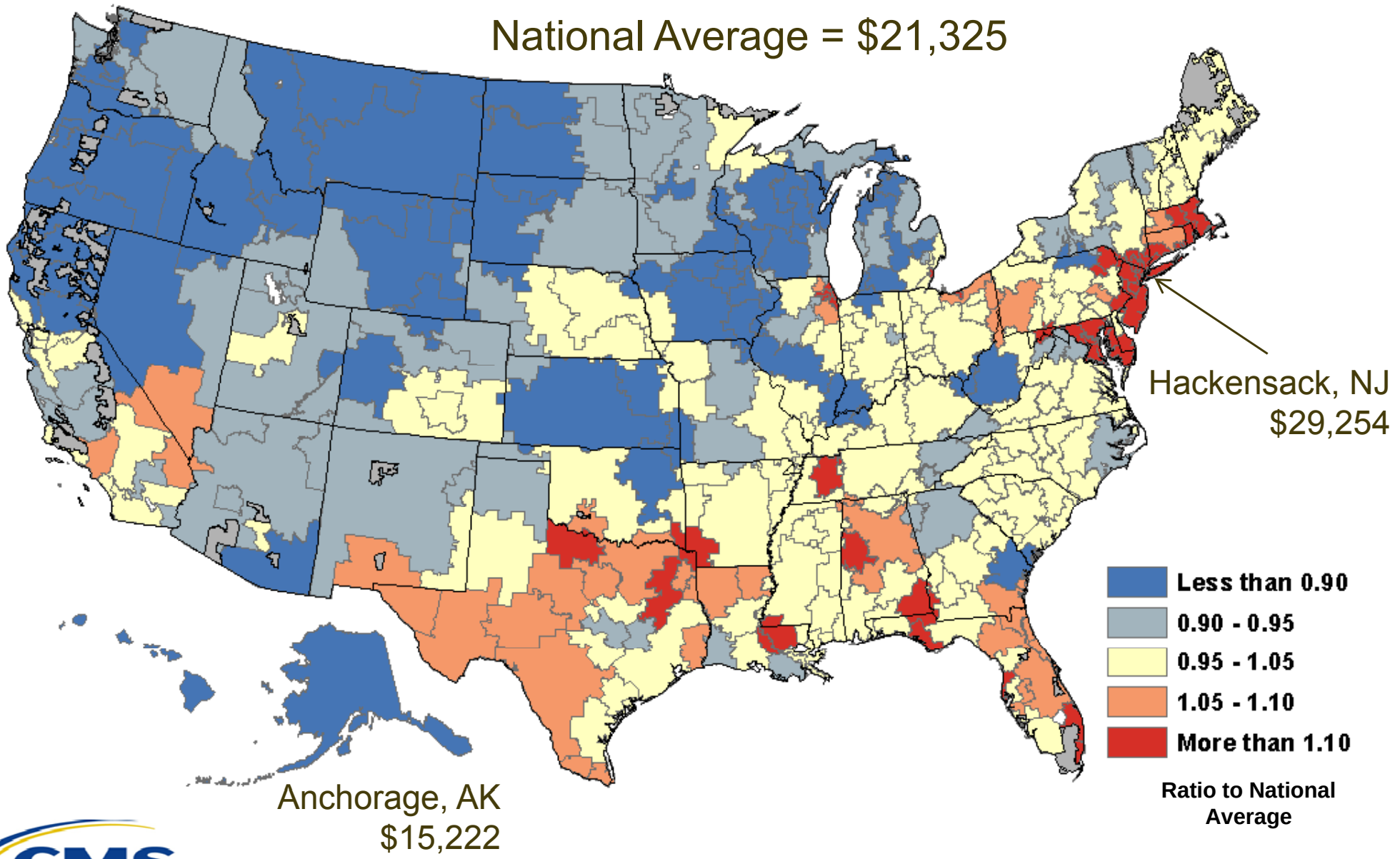
Average Episode Cost by First/Second Service Used after Discharge

1st Service After Index		*2nd Service After Index*						
Service	**Avg. Episode Cost**	**None**	**Therapy**	**HHA**	**SNF**	**IRF**	**LTCH**	**Acute Admit**
None	*$9,301*	$9,301	--	--	--	--	--	--
Therapy	*$14,000*	**$13,551**	--	$18,196	*	*	--	$24,281
HHA	*$16,920*	**$15,689**	**$17,088**	--	$27,202	*	*	$28,548
SNF	*$27,154*	$24,860	**$23,388**	**$26,729**	$36,345	$40,065	*	$45,865
IRF	*$32,746*	$25,466	$26,887	$32,595	$50,015	*	*	$52,724
LTCH	*	*	*	*	*	*	--	*
Acute Admit	*$24,319*	$15,732	$20,609	$24,463	$36,599	*	*	*
	$21,325	*$15,311*	*$19,764*	*$27,944*	*$41,405*	*$39,711*	*	*$39,881*

Episodes that accounted for less than 0.1% of the total are marked with an asterisk

Limited to episodes where the beneficiary survived the index admit

Average Episode Cost by HRR



Limited to episodes where the beneficiary survived the index admit

Outlier HRRs

	Average Episode Length	% of "No PAC" Episodes	Share of PAC Episode Dollars Going to . . .				
			SNF	HHA	IRF	Therapy	LTCH
High Outlier HRRs*	69	3.4%	46.40% ($5,217)	22.60% ($2,505)	24.00% ($2,825)	6.60% ($724)	0.40% ($42)
All HRRs	56	7.1%	47.90% ($3,986)	28.20% ($2,345)	16.20% ($1,344)	7.20% ($595)	0.50% ($46)
Low Outlier HRRs*	46	15.6%	54.00% ($3,112)	24.00% ($1,332)	11.10% ($648)	10.80% ($601)	0.10% ($6)

*Outlier HRRs had spending that was 15% above / below the national average.

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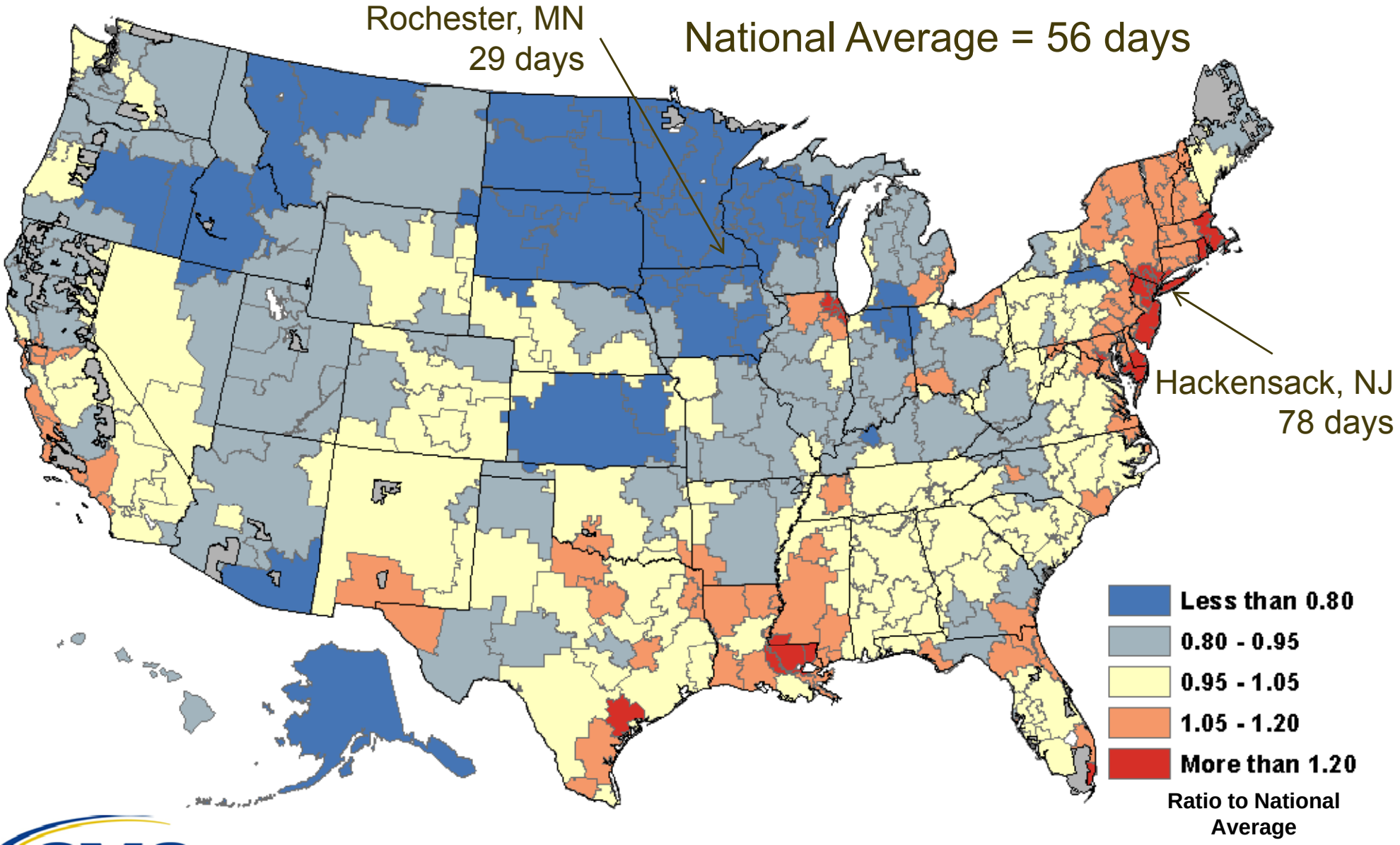
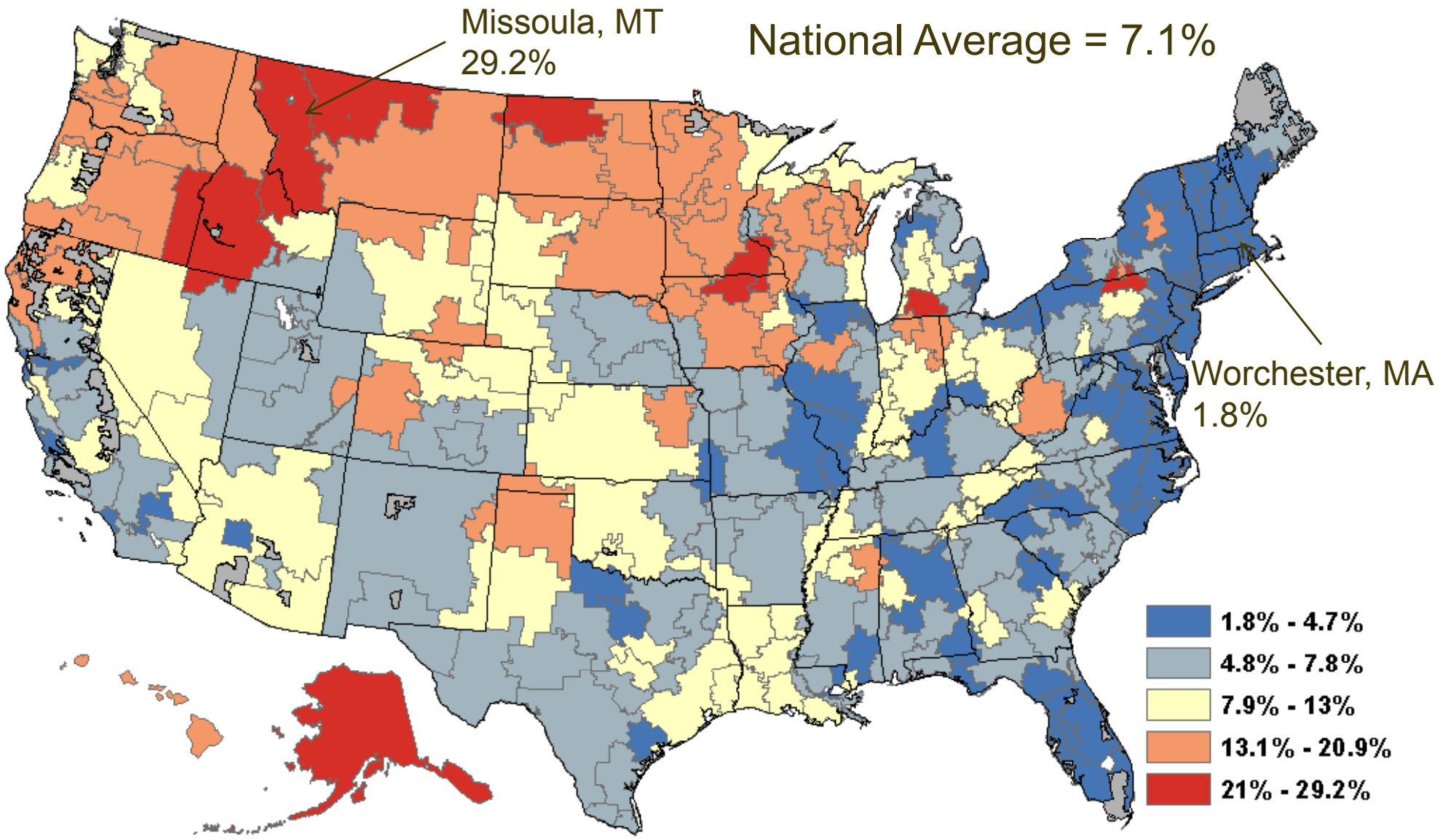
Limited to episodes where the beneficiary survived the index admit

Average Episode Length



Limited to episodes where the beneficiary survived the index admit

Percent of Episodes without PAC services



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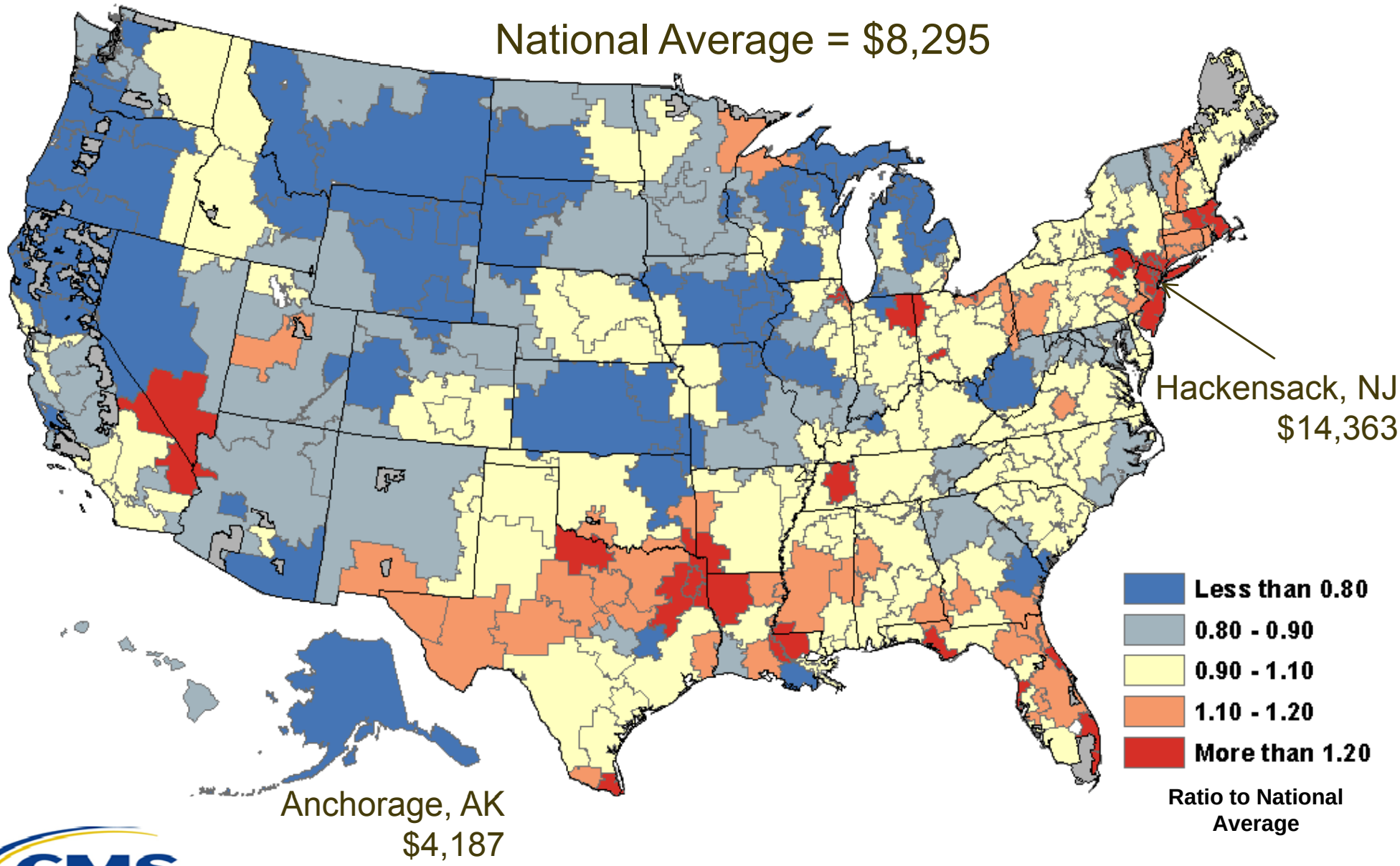
Limited to episodes where the beneficiary survived the index admit

Average PAC Cost (for Episodes with PAC spending)



Limited to episodes where the beneficiary survived the index admit



Real-Time Reporting of Medicare Readmissions Data

Niall Brennan
Acting Director, Offices of Enterprise Management

Why CMS is Focused on Readmissions

- Nearly one in five fee-for-service Medicare patients returns to the hospital within 30 days of being discharged
  - 2 million readmissions each year
  - 139,000 beneficiaries had 3 or more readmissions in 2012
- High readmission rate can be indicator of poor quality care
- Readmissions estimated to cost Medicare $26 billion per-year, $17 billion of which is potentially avoidable
- Examples of CMS initiatives to reduce readmissions:
  - Hospital Readmissions Reduction Program
  - Partnership for Patients
  - Shared savings programs
  - Quality Improvement Organizations

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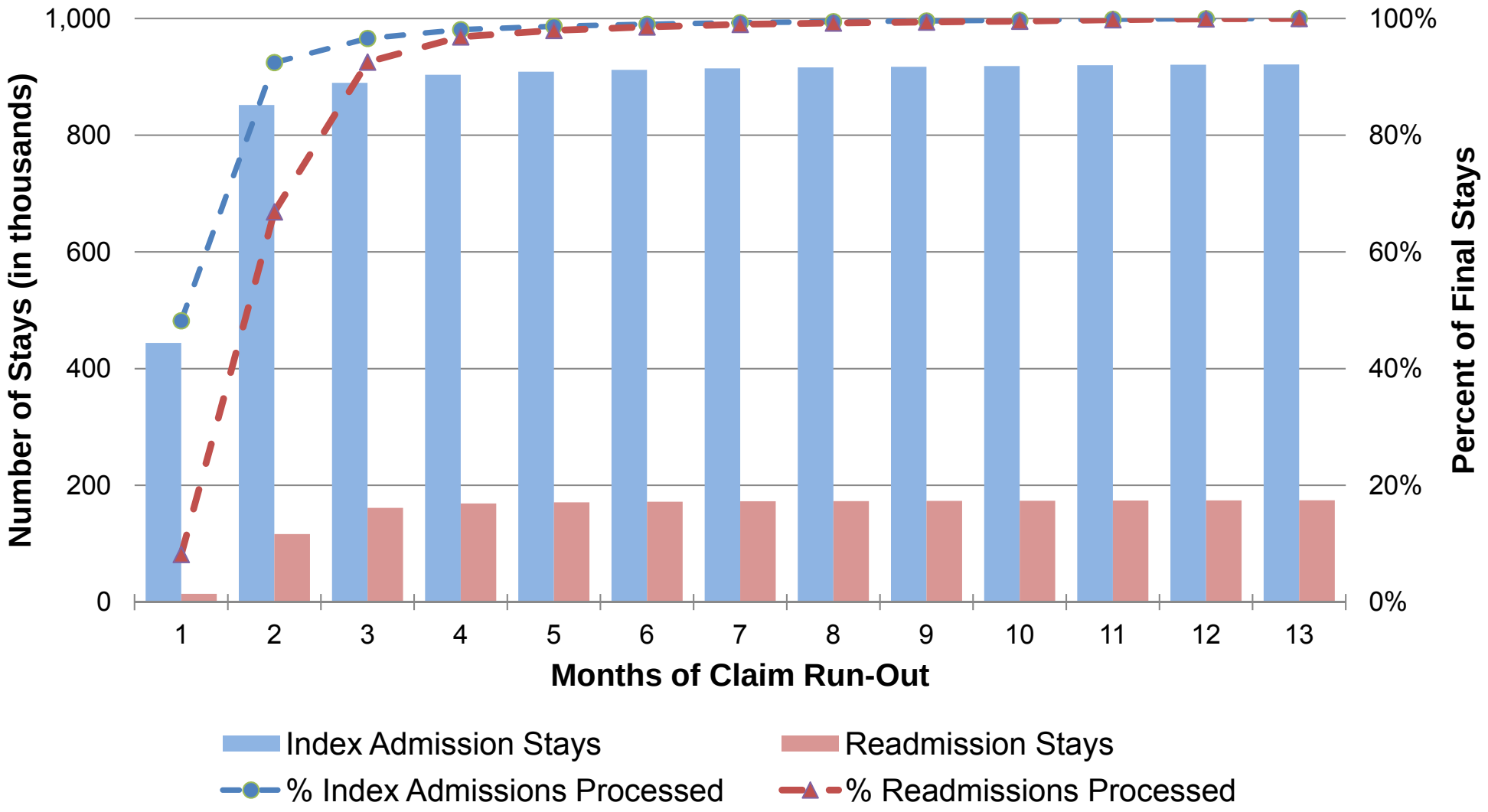
OIPDA Readmission Rate Methodology

- Source: 100% Medicare claims from Chronic Conditions Warehouse
- Medicare fee-for-service beneficiaries enrolled in Part A
- All acute care hospitals (IPPS and CAH)
- Index stay = impatient admission where patient did not die in hospital
- Readmission stay = inpatient admission within 30 days of discharge from index stay
- Stays can count as both index admission and readmission
- Readmission is attributed to the month of index stay and location of facility where index admission occurred
- Not risk adjusted

Real-Time Reporting of Readmissions Data

- Takes up to 13 months for all Medicare claims to reach final action status
- OIPDA adjusts preliminary readmissions data to compensate for claims that have not reached final action
- Can report reliable monthly readmissions data after just 2 months of claims run-out
  - Far faster than other types of reporting
  - Difficult to perform risk adjustment on real-time basis
- Timely reporting improves feedback to CMS programs and helps enable faster quality improvement

Claims Maturity for Index and Readmission Stays For a Typical Month

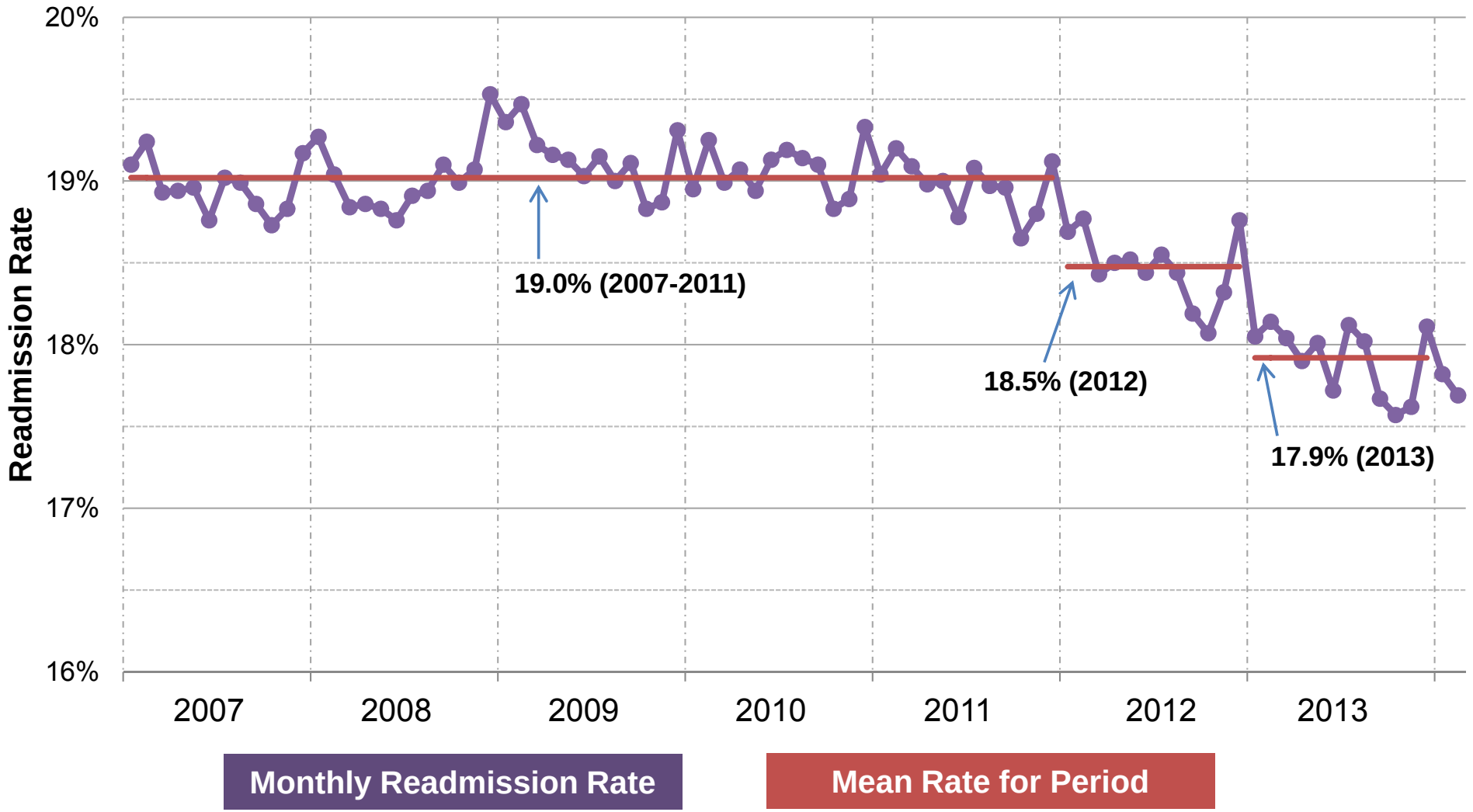


Improvement in Readmission Rate Among Medicare FFS Beneficiaries

- After holding steady at 19% over 2007-2011 period, national readmission rate started falling in 2012
  - 18.5% in 2012 and 17.9% in 2013
- Improvement has been broad-based across geography, demographics, and clinical conditions
- Estimate 150,000 fewer readmissions occurred during 2012-2013 than if readmission rate had remained at 19%
- Reduction in inpatient readmissions does not seem to be driven by substitution by outpatient ED visits or observation stays

Medicare 30-Day, All-Condition Readmission Rate

January 2007 – February 2014



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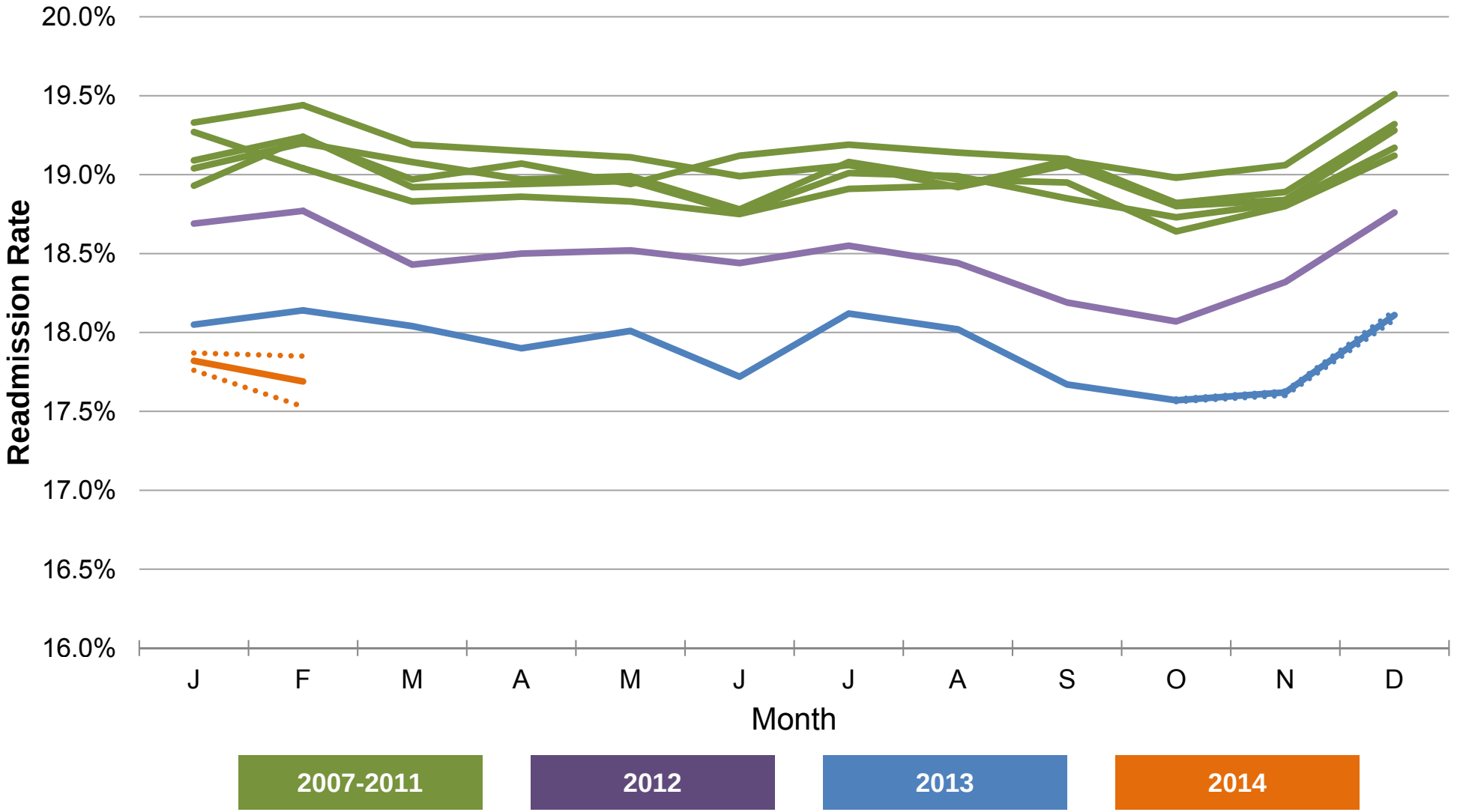
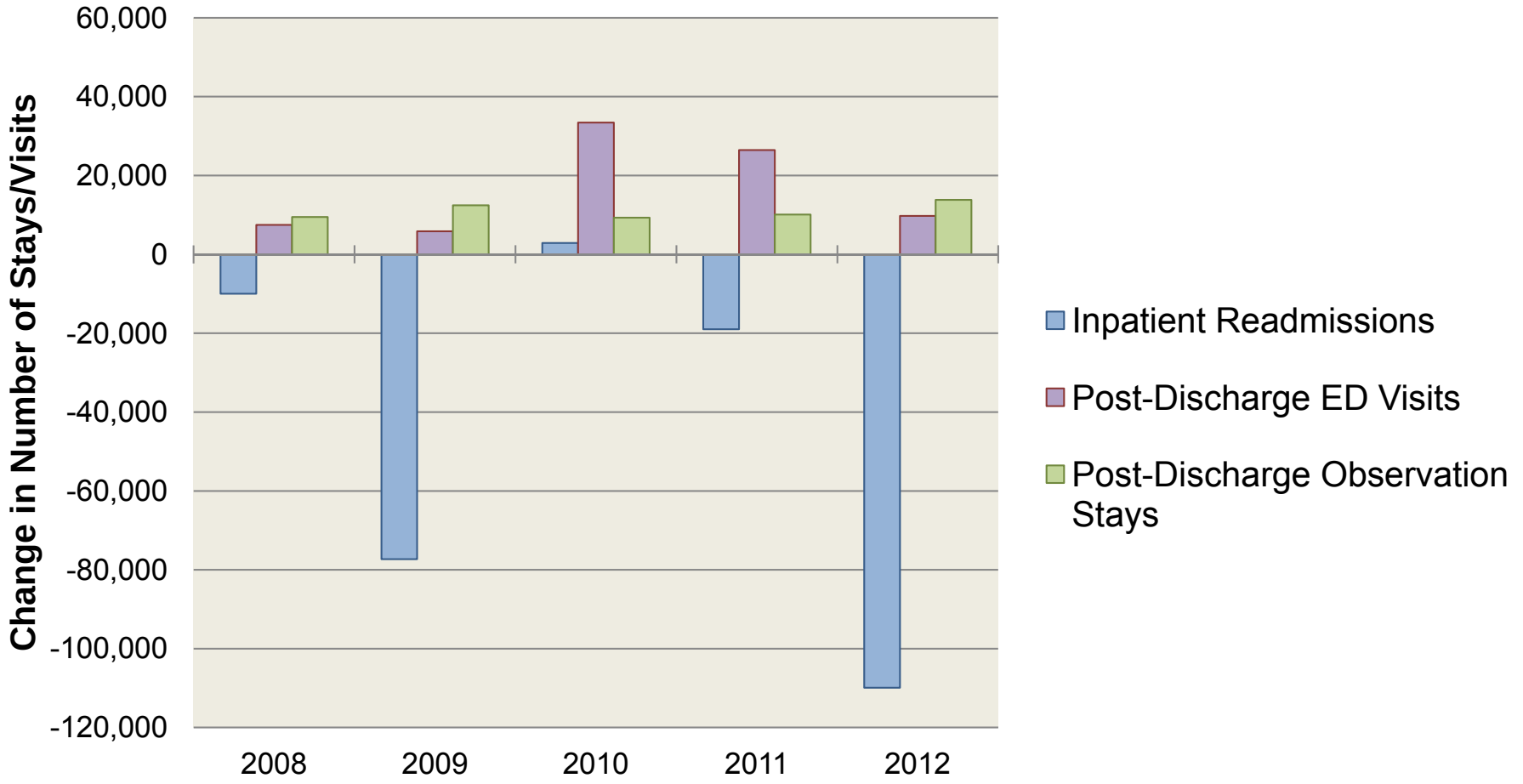
Medicare 30-Day, All-Condition Readmission Rate

January 2007 – February 2014



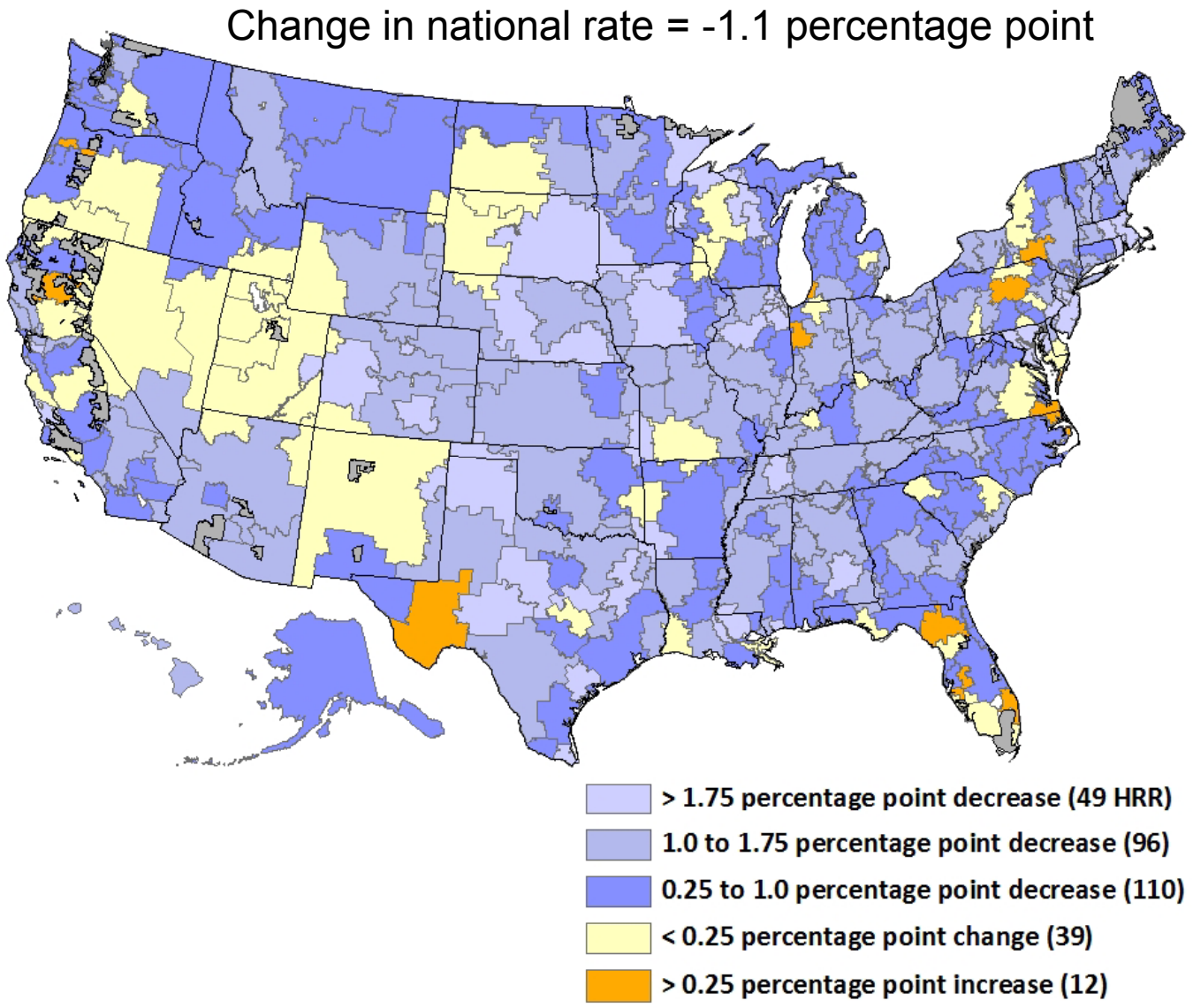
Annual Change in Hospital Services 30 Days Post Inpatient Discharge

- Hospital outpatient services growing more slowly than readmissions have been declining



Change in Medicare All-Condition Readmission Rate

2007-2011 Mean to 2013, by Hospital Referral Region



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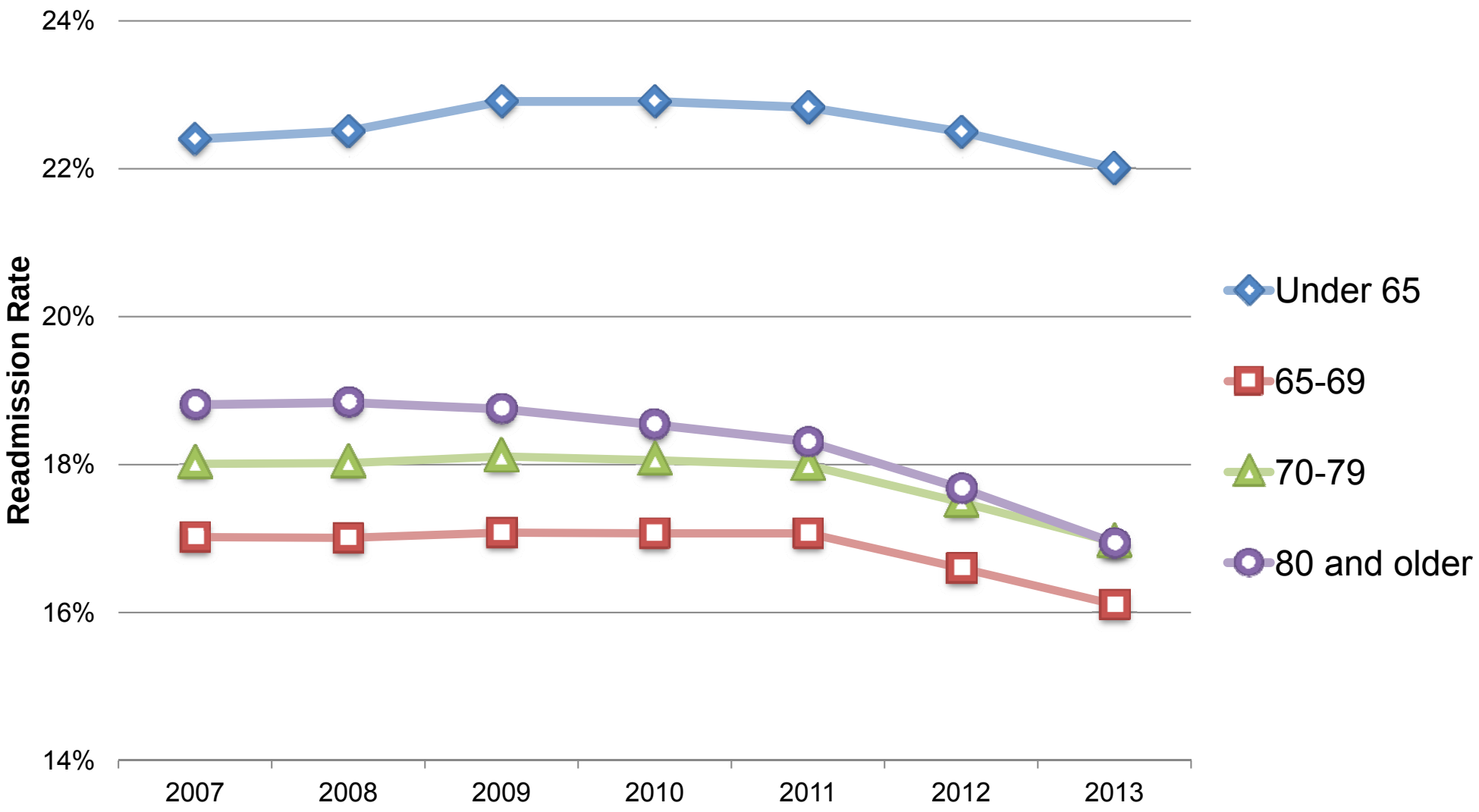
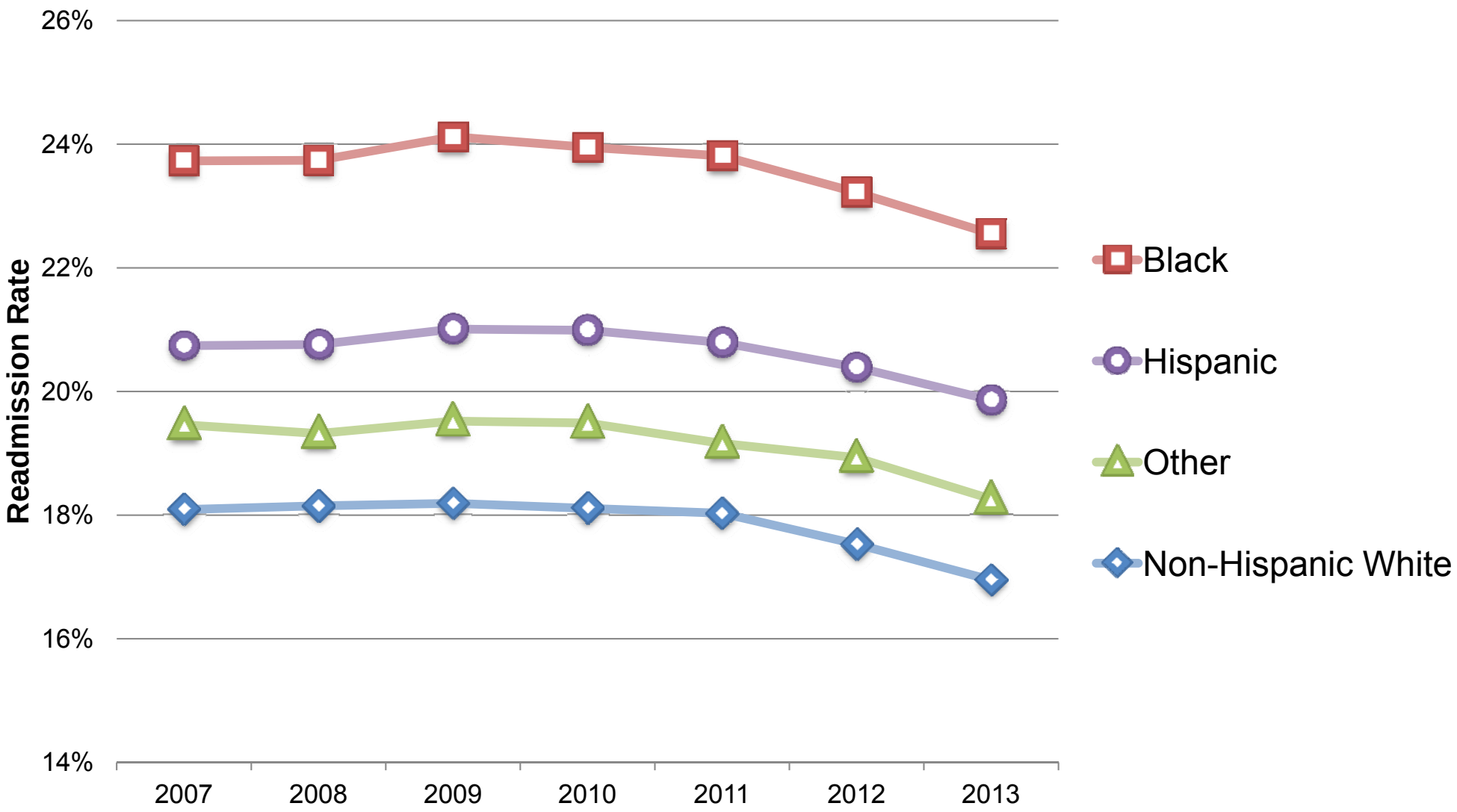
Medicare All-Condition Readmission Rate by Age

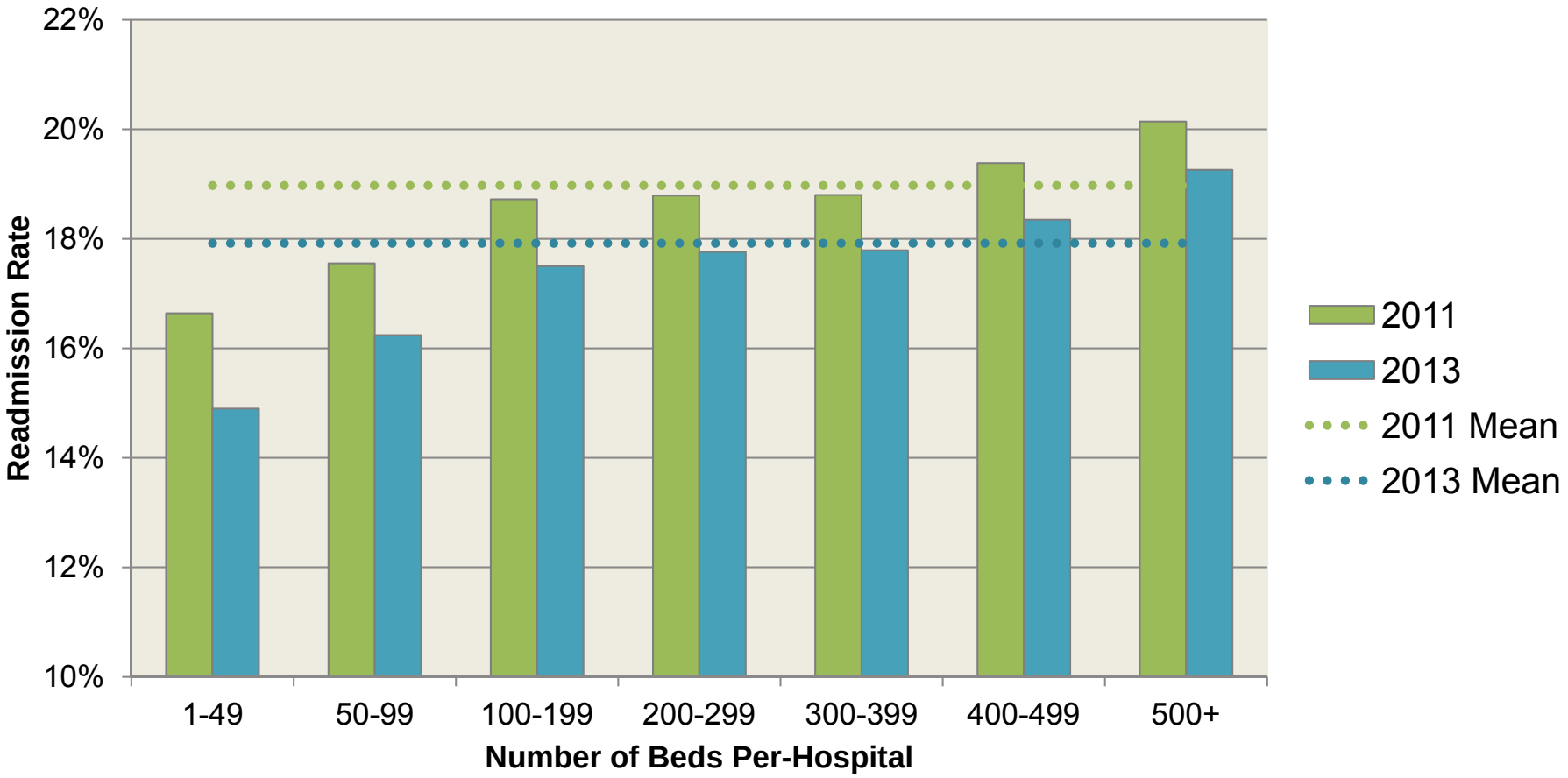


Medicare All-Condition Readmission Rate by Race



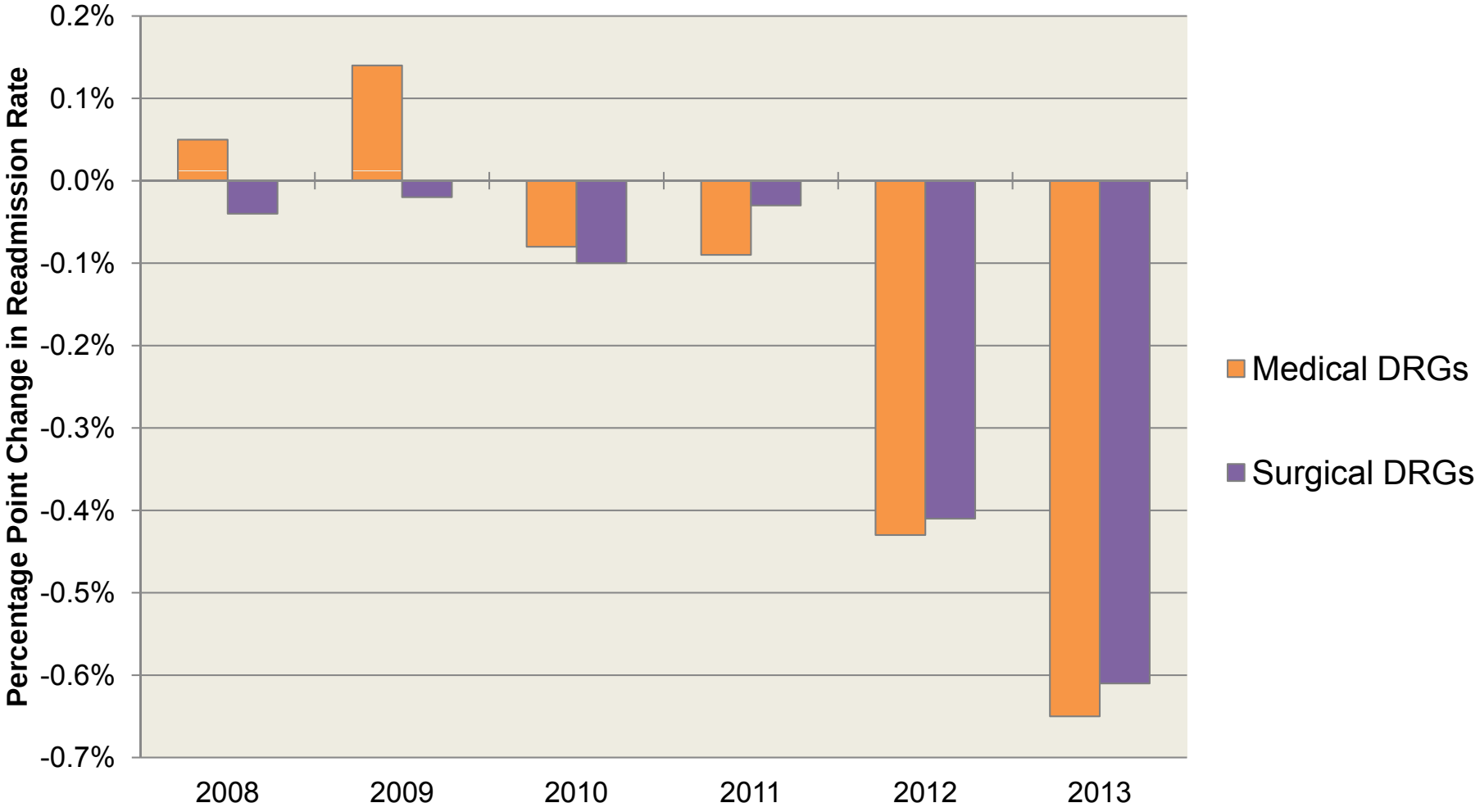
Medicare All-Condition Readmission Rate by Hospital Size

- Smaller hospitals started with lower rates, but have also seen the largest reductions



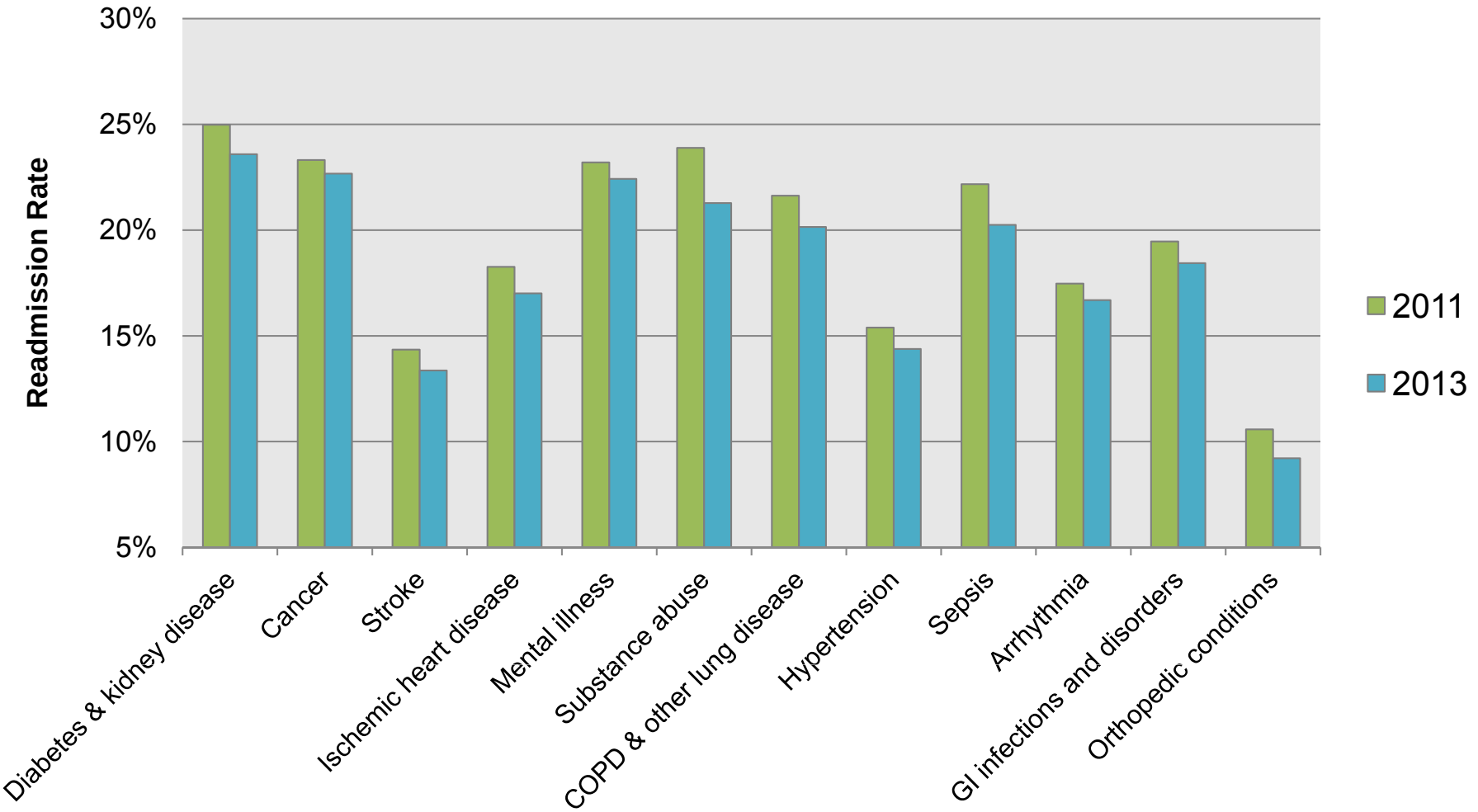
Annual Percentage Point Change in Readmission Rate by DRG Type

- Rates have decreased across different types of services



Medicare Readmission Rate for Selected Conditions

- These conditions represent about half of total readmission stays



Hospital Readmissions Reduction Program (HRRP)

- Section 3025 of the Affordable Care Act
- Reduces Medicare payments to IPPS hospitals with excess readmissions
- Started by measuring heart failure, acute myocardial infarction, and pneumonia
  - Payment adjustments began in FY 2012
- CMS proposing to expand measures to include COPD and elective hip and knee replacement
  - 5 conditions represent 20% of all readmissions
  - Payment adjustments based on all 5 measures would start in FY 2015
- Readmission rates for these conditions have gone down, but improvement is not limited to these conditions

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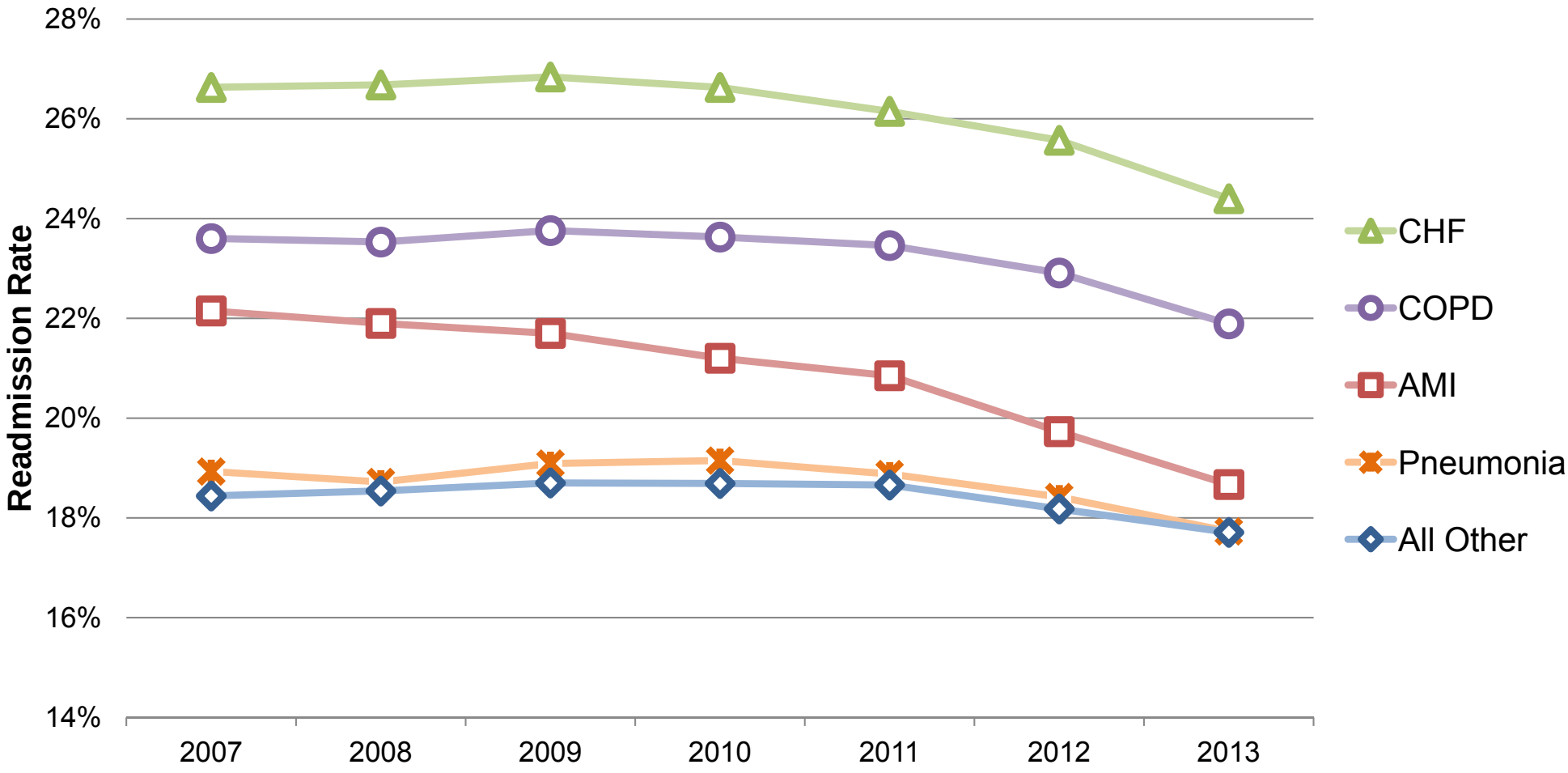
Medicare Unplanned Readmission Rate for Conditions Measured by HRRP



Readmission rate for elective hip and knee replacement fell from 4.7% in 2011 to 3.8% in 2013 (not shown).