TRUVEN HEALTH ANALYTICS

STATE OF DELAWARE – ACTIVE & EARLY RETIREES

Trend Driver Analysis

September 2015

ANALYTIC PARAMETERS

- Active Self-Insured population (unless otherwise specified)
  - Actives and Early Retirees identified as Employee Status Group = ‘Active & Early Retiree’
  - Self-Insured identified as Coverage Indicator Med = ‘Y’
- Time Periods (unless otherwise specified)
  - Prior Year (PRY): reflects claims incurred May 2013 through April 2014, paid through July 2014
  - Current Rolling Year (CRY): reflects claims incurred May 2014 through April 2015, paid through July 2014
  - Data completed and annualized for claims incurred but not yet reported (IBNR)
- Self-insured group health medical, mental health and prescription drug claims data
  - Does not include admin fees, fully-insured HMO premiums, vision or dental claims; data not offset by employee paycheck contributions
- High cost claimants defined as members who incurred $100K or more in medical and drug allowed amounts during the calendar year
- Normative comparisons were made to the MarketScan™ database (i.e., Truven Health’s book of business), unless otherwise specified
- Health risk scores were calculated using DxCG’s diagnostic cost groupings, which use demographics and diagnostic information to assess risk; risk score is the concurrent non-rescaled value (a value of 100 represents the average for the nationwide dataset on which the model was developed)

DEMOGRAPHICS

	PRY	CRY	% Change
Employees (Average)	42,860	43,197	1%
Average Family Size	2.23	2.24	0%
Average Age			
Employees	47.2	47.2	0%
Members	35.0	34.9	0%
Gender: % Male			
Employees	39%	38%	0% pt
Members	46%	46%	0% pt
Health Risk*			
Employees	134	161	20%
Members	106	127	20%

Were there changes to State of Delaware's demographic profile between the prior and current period?

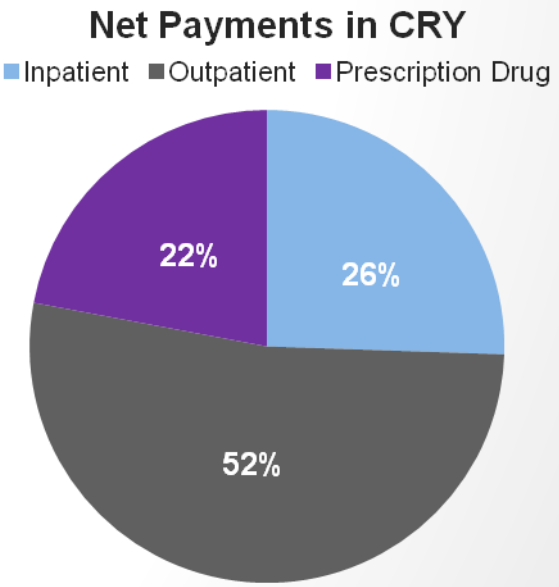
- State of Delaware experienced a 1% increase in employee self-insured plan enrollment
- The demographic make-up of the self-insured active population remained stable
- State of Delaware's health risk in 2014 was higher than the DCG nationwide average of 100, indicating a higher than average illness burden in the State of Delaware population

* Health Risk Scores based on calendar years 2013 and 2014

TRUVEN HEALTH ANALYTICS

MEDICAL AND PRESCRIPTION DRUG COSTS

Net Payments per Employee			
	PRY	CRY	% Change
Medical	**$9,613**	**$10,316**	**7%**
Inpatient	$3,058	$3,379	11%
Outpatient	$6,555	$6,938	6%
Prescription Drug	**$2,583**	**$2,917**	**13%**
Total	**$12,195**	**$13,234**	**9%**



How did State of Delaware's plan costs trend year over year?

- On a per employee basis, State of Delaware net payments increased 9% in the current year
- Outpatient care, which accounted for 52% of CRY spend, trended at a lower rate than inpatient care and prescription drug (6% v. 11% and 13% respectively)

TRUVEN HEALTH ANALYTICS

COMPARISON TO OTHER STATE EMPLOYERS[1]

● Above Norm ◉ Below Norm ✧ Similar to Norm *(within 2%)*

		Cost, Use, and Price Rates*			Trends**	
		State of DE	Norm	Comparison	State of DE	Norm
Medical	Medical: Allowed Amounts per Member	$5,008	$4,288	●	7%	5%
	Medical: Net Payments per Member	$4,607	$3,658	●	7%	7%
	Inpatient: Admits per 1,000 Members	70	60	●	3%	2%
	Inpatient: Average Length of Stay	4.6	4.1	●	-2%	3%
	Inpatient: Allowed Amounts per Admit	$22,090	$18,753	●	3%	1%
	Outpatient: Services per Member	27.7	27.2	✧	3%	3%
	Outpatient: Allowed Amounts per Service	$124	$109	●	2%	2%
Rx	Rx: Allowed Amounts per Member	$1,460	$1,124	●	11%	14%
	Rx: Net Payments per Member	$1,303	$974	●	13%	18%
	Rx: Allowed Amount per Days Supply	$3.43	$3.01	●	10%	5%
	Rx: Days Supply per Member	425	373	●	1%	8%

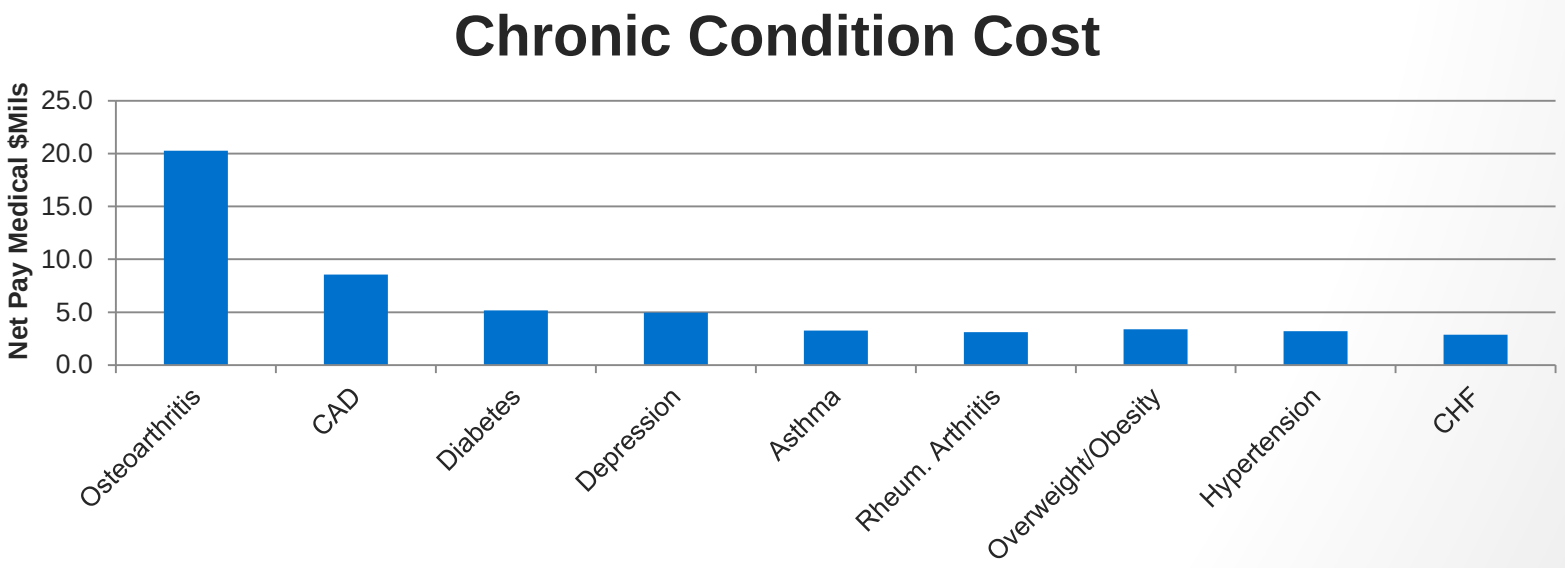
How does State of Delaware compare to other State employers?

- State of Delaware has **higher** cost, use and price rates than the Norm for all metrics except Outpatient Services per Member
- The Allowed Amount per Admit continues to increase year-over-year
- State of Delaware's drug costs are significantly above norm due to both higher drug price and use

*Rates for State of DE Active & Early Retiree are CRY and for Norm are 2013 MSN U.S. Total norms trended to 2014 utilizing 4Q14 Employer Semi-Annual Norm Trends for the State
**Trends represent PRY to CRY for DE and Norm trends are based on 4Q14 Employer Semi-Annual Norms for the State Employer Active population

TRUVEN HEALTH ANALYTICS

CHRONIC CONDITION COST
ACTIVES AND EARLY RETIREES

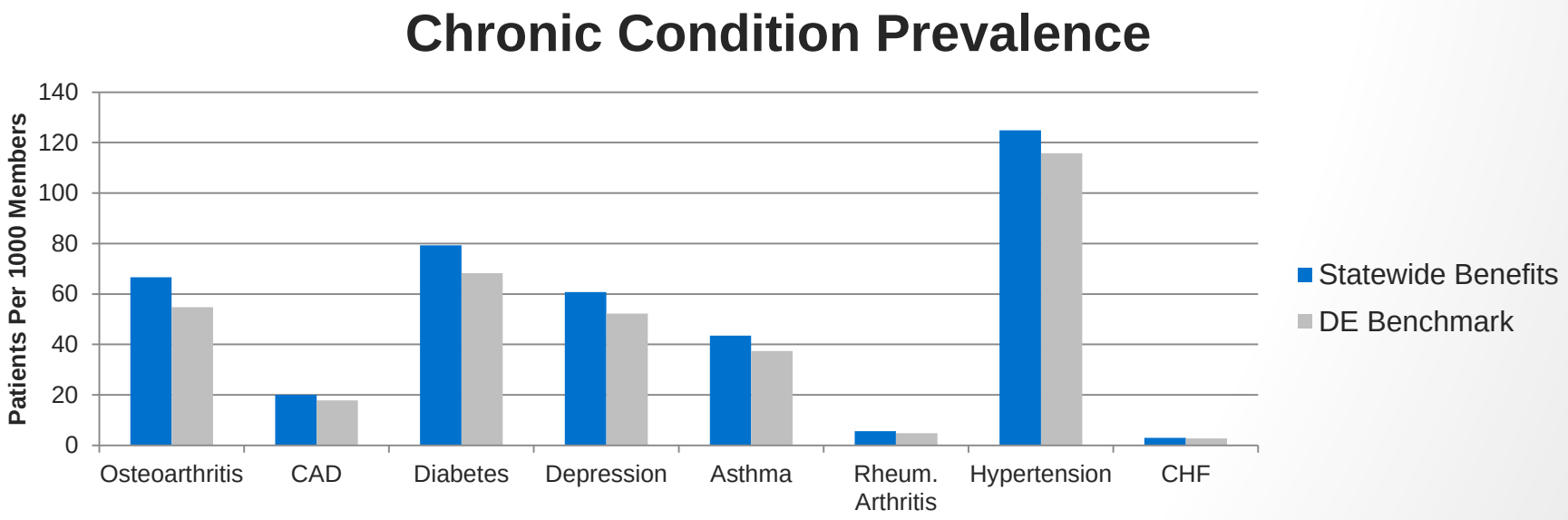


What chronic health conditions drive State of Delaware's comparative high cost?

- Spending on Osteoarthritis and Coronary Artery Disease exceeds the next 7 conditions combined
- Nearly all of these conditions are related to overweight and inactivity

TRUVEN HEALTH ANALYTICS

CHRONIC CONDITION PREVALENCE ACTIVES AND EARLY RETIREES



How does chronic health condition prevalence compare to the State of Delaware's benchmarks?

- The Statewide Benefits population reflects a higher prevalence of every chronic condition compared to the Delaware state average
- Prevalence for all conditions are 10% or more above the state average (except hypertension which is 7.8% higher and CHF, which is 8.9% higher)

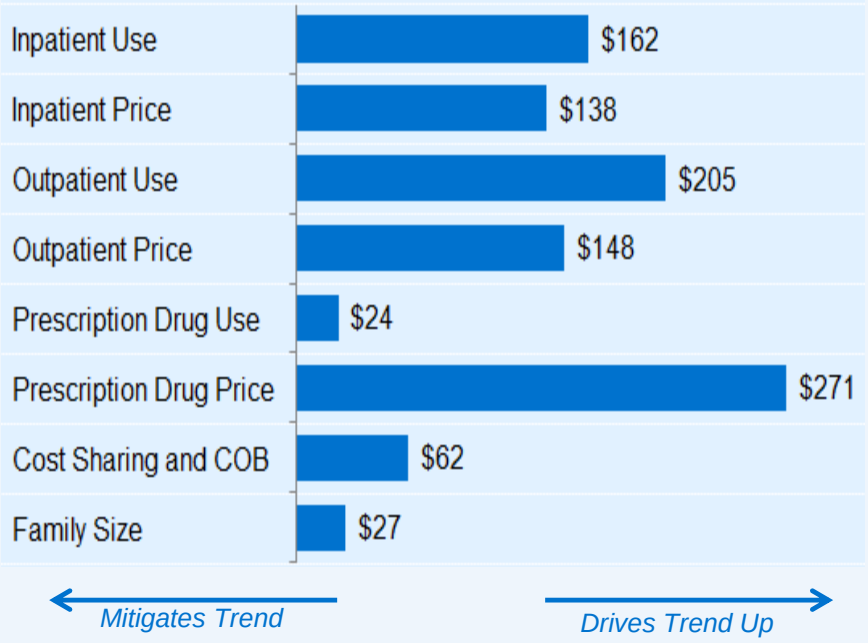
TRUVEN HEALTH ANALYTICS

DRIVERS OF NET PAYMENT PEPY TREND

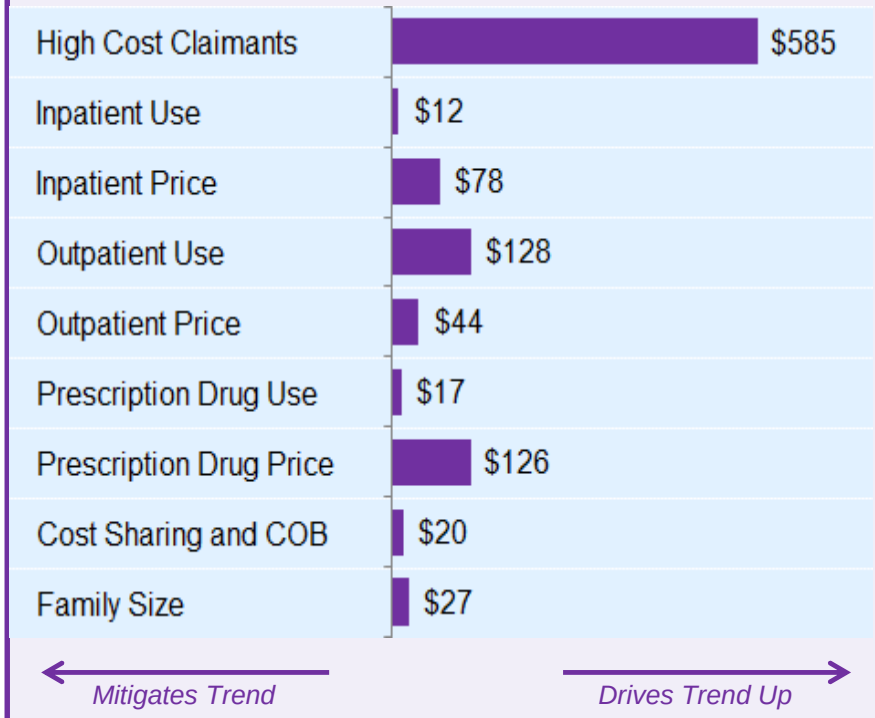
State of Delaware net payments **increased $1,038** per employee in the current year

Net Payment PEPY in CRY = $13,234
PRY-to-CRY Trend = 8.5%

The factors driving this increase **before** breaking out the impact of high cost claimants:



The factors driving this increase **after** breaking out the impact of high cost claimants*:

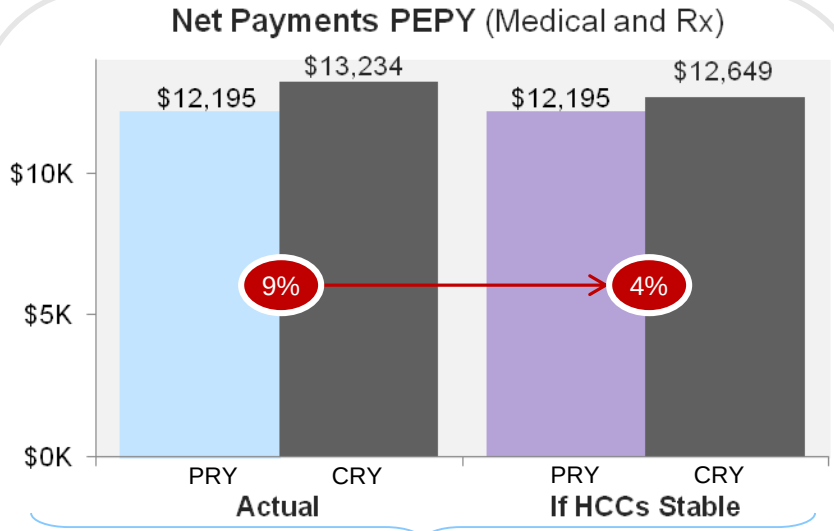


IP = Inpatient; OP = Outpatient; Rx = Prescription Drug; OOP = Employee Out of Pocket; COB = Coordination of Benefits (e.g., Medicare)

*High cost claimant (HCC) prevalence, cost, price and use rates kept stable to isolate HCC impact from other factors

TRUVEN HEALTH ANALYTICS

IMPACT OF HIGH COST CLAIMANTS



High cost claimants (HCCs) were the mitigating driver of State of Delaware's overall per member net payment trend—*when HCC prevalence and cost per claimant are kept stable, the trend is **4%** instead of **9%***

What were the high cost claimant (HCC) prevalence, cost and condition trends?

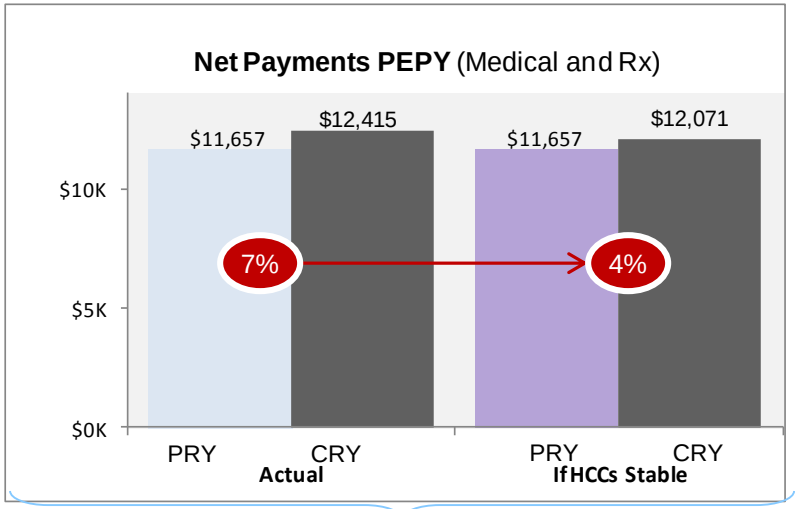
- HCC prevalence rose 21% (to 6.3 HCCs per 1,000 members)
- Net payments per HCC increased 4% (to $205,150)
- Chronic conditions accounted for 61% of HCC medical net payments in the CRY
- The top five medical conditions for HCCs were similar in both the years except for CAD and Cerebrovascular disease

	PRY Top Clinical Conditions	HCC Med $		Top Medical Conditions for HCCs (based on medical net payments)		CRY Top Clinical Conditions	HCC Med $	
HCCs in PRY	Newborns, w/wo Complication	$4.4M	5%		HCCs in CY	Renal Function Failure	$5.5M	5%
	Coronary Artery Disease	$3.8M	4%			Newborns, w/wo Complication	$4.8M	4%
	Renal Function Failure	$3.6M	4%			Chemotherapy Encounters	$4.2M	4%
	Chemotherapy Encounters	$3.5M	4%			Cerebrovascular Disease	$3.7M	3%
	Cardiovasc Disord, Congenital	$3.5M	4%			Signs/Symptoms/Oth Cond, NEC	$3.6M	3%
	All Other	$71.5M	79%			All Other	$87.8M	80%

*The top three diagnoses in PRY for HCCs with "Signs/Symptoms/Oth Cond, NEC" were V5789 - Care involving rehabilitation px NEC, 7802 - Syncope & collapse and V552 - Attention to ileostomy and for CRY they were V5789 - Care involving rehabilitation px NEC, 79989 - Ill-defined condition NEC and V571 - Care involving other physical therapy.

TRUVEN HEALTH ANALYTICS

IMPACT OF HIGH COST CLAIMANTS: FY `13 – FY `14



High cost claimants (HCCs) were the mitigating driver of State of Delaware's overall per member net payment trend—*when HCC prevalence and cost per claimant are kept stable, the trend is **4%** instead of **7%***

What were the high cost claimant (HCC) prevalence, cost and condition trends?

- HCC prevalence rose 14% (to 5.6 HCCs per 1,000 members)
- Net payments per HCC increased 2% (to $196,452)
- Chronic conditions accounted for 63% of HCC medical net payments in the CRY
- The top five medical conditions for HCCs were similar in both years. Newborns was a large, new HCC condition in FY `14, but did not make the top 5 in FY `13

Top Medical Conditions for HCCs (based on medical net payments)

HCCs in CY	CRY Top Clinical Conditions	HCC Med $	
	Coronary Artery Disease	$4.3M	5%
	Chemotherapy Encounters	$3.6M	4%
	Infections, NEC	$3.6M	4%
	Condition Rel to Tx - Med/Surg	$3.6M	4%
	Renal Function Failure	$3.5M	4%
	All Other	$65.5M	78%

HCCs in CY	CRY Top Clinical Conditions	HCC Med $	
	Newborns, w/wo Complication	$4.9M	5%
	Coronary Artery Disease	$4.3M	4%
	Cardiovasc Disord, Congenital	$3.9M	4%
	Renal Function Failure	$3.6M	4%
	Chemotherapy Encounters	$3.6M	4%
	All Other	$76.1M	79%

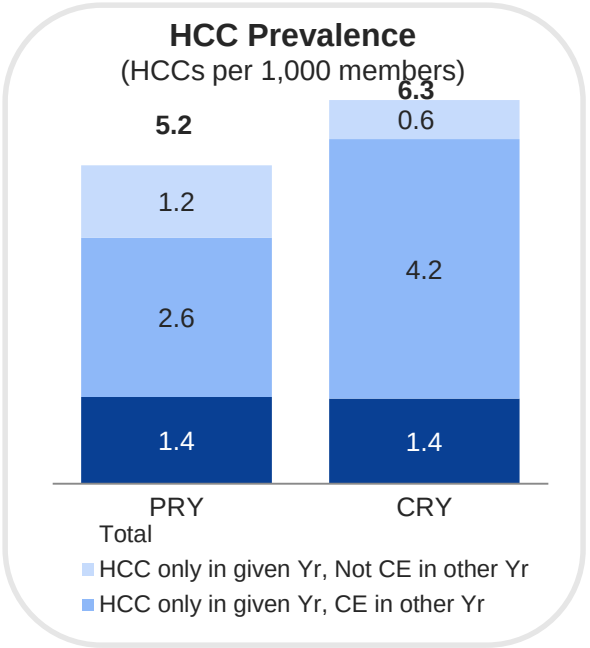
*The top three diagnoses in PRY for HCCs with "Signs/Symptoms/Oth Cond, NEC" were V5789 - Care involving rehabilitation px NEC, 7802 - Syncope & collapse and V552 - Attention to ileostomy and for CRY they were V5789 - Care involving rehabilitation px NEC, 79989 - Ill-defined condition NEC and V571 - Care involving other physical therapy.

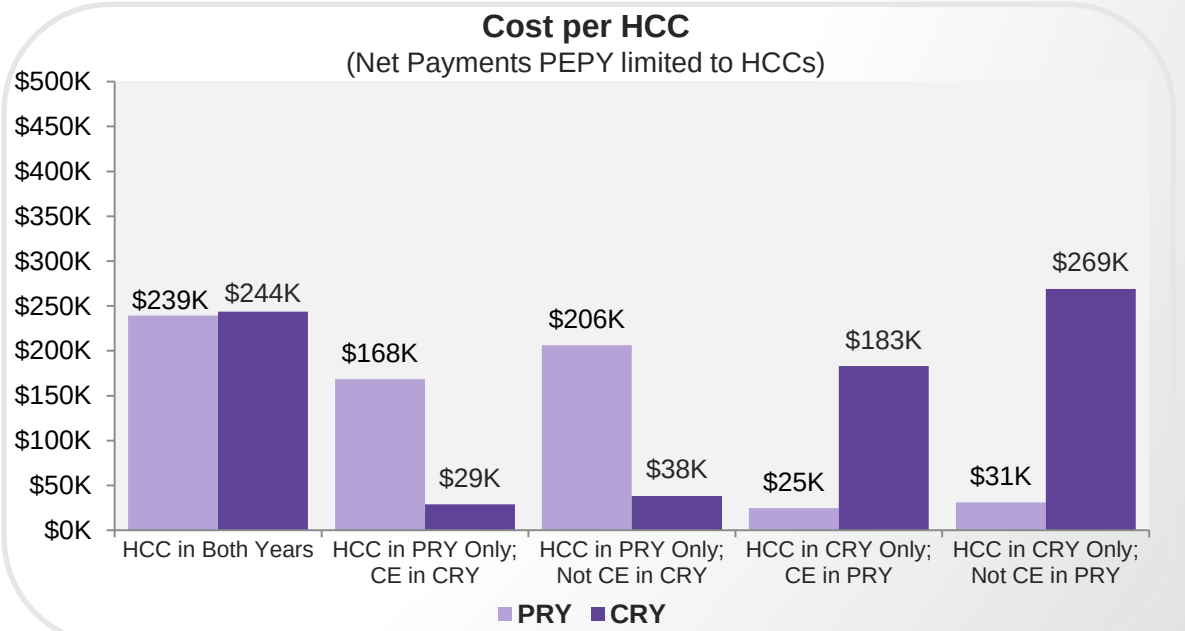
TRUVEN HEALTH ANALYTICS

HIGH COST CLAIMANTS YEAR-TO-YEAR

What happened to HCCs and their HCC status between the PRY and the CRY?

- Of the 498 HCCs in the PRY, 27% remained high cost in the CRY, 50% were not high cost in the CRY despite maintaining self-insured coverage for the entire period, and 23% were not high cost in the CRY and stopped being enrolled in a self-insured plan at some point in the CRY
- Of the 607 HCCs in the CRY, 22% were also high cost in the PRY, 67% were not high cost in the PRY despite maintaining self-insured coverage for the entire period, and 11% were not high cost and were not enrolled in a self-insured plan for the entire PRY





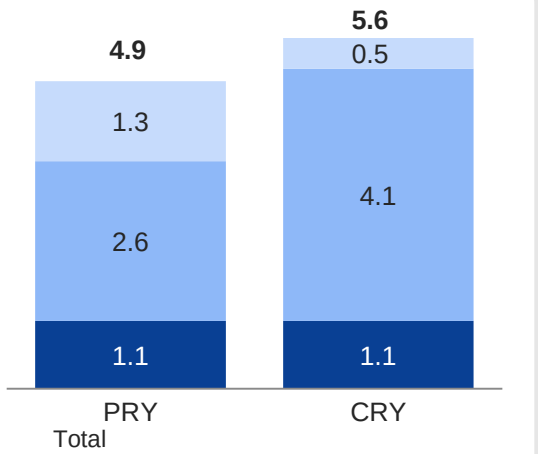
HCC in Both Years: Members who were HCCs in both the PRY and the CRY
HCC only in given Yr, CE in other Yr: Members who were HCCs in one time period but not the other, despite being continuously enrolled in a self-insured medical plan with active status for the entire year that they were not high cost
HCC only in given Yr, Not CE in other Yr: Members who were HCCs in one time period but not the other—these members were not continuously-enrolled in a self-insured medical plan with active status for the year that they were not high cost

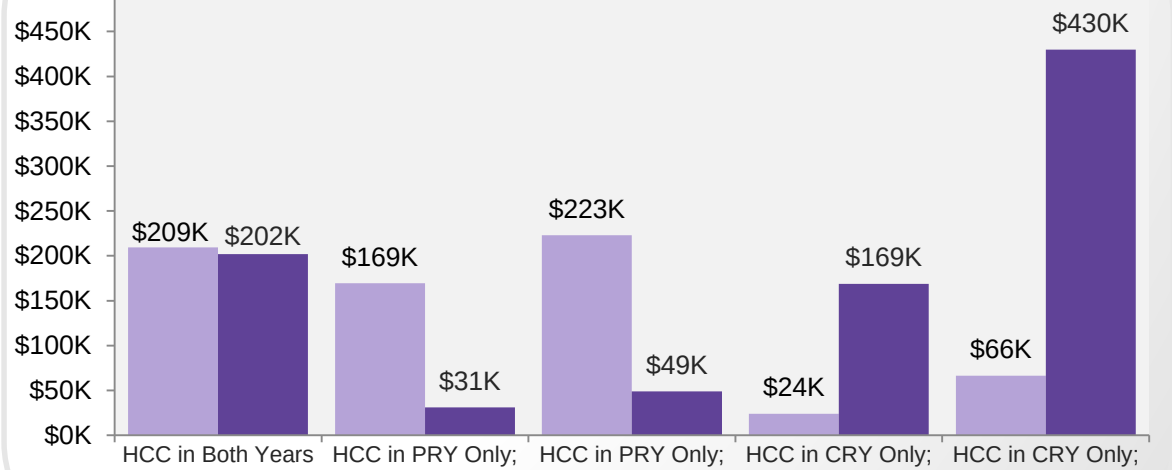
TRUVEN HEALTH ANALYTICS

HIGH COST CLAIMANTS YEAR-TO-YEAR: FY `13 - FY `14

What happened to HCCs and their HCC status between the PRY and the CRY?

- Of the 470 HCCs in the PRY, 22% remained high cost in the CRY, 52% were not high cost in the CRY despite maintaining self-insured coverage for the entire period, and 25% were not high cost in the CRY and stopped being enrolled in a self-insured plan at some point in the CRY
- Of the 539 HCCs in the CRY, 19% were also high cost in the PRY, 73% were not high cost in the PRY despite maintaining self-insured coverage for the entire period, and 8% were not high cost and were not enrolled in a self-insured plan for the entire PRY





HCC in Both Years: Members who were HCCs in both the PRY and the CRY
HCC only in given Yr, CE in other Yr: Members who were HCCs in one time period but not the other, despite being continuously enrolled in a self-insured medical plan with active status for the entire year that they were not high cost
HCC only in given Yr, Not CE in other Yr: Members who were HCCs in one time period but not the other—these members were not continuously-enrolled in a self-insured medical plan with active status for the year that they were not high cost

TRUVEN HEALTH ANALYTICS

HIGH COST CLAIMANTS YEAR-TO-YEAR (cont'd)

Did the percent of medical spend related to chronic conditions differ between repeat and new HCCs?

- Both repeat HCCs and new HCCs in the CRY who had been enrolled for the entire PRY had 63% of their CRY medical net payments for chronic conditions
- New HCCs in the CRY who had not been enrolled the entire PRY had less than half (41%) of their CRY medical costs for chronic conditions

Top Medical Conditions for HCCs in PRY

	Clinical Condition in PRY	Net Pay Med	
HCC in CY and in PRY	Cardiovasc Disord, Congenital	$3.0M	10%
	Renal Function Failure	$2.5M	9%
	Chemotherapy Encounters	$1.7M	6%
	Cancer - Leukemia	$1.7M	6%
	Lipid Disorders	$1.2M	4%
	All Other	$18.8M	65%
HCC in PY only; CE in CRY	Newborns, w/wo Complication	$3.5M	9%
	Coronary Artery Disease	$2.5M	7%
	Cardiac Arrhythmias	$1.9M	5%
	Cancer - Breast	$1.7M	4%
	Musculosk Disord, Congenital	$1.7M	4%
	All Other	$27.8M	71%
HCC in PY only; Not CE in CRY	Infections, NEC	$1.4M	6%
	Condition Rel to Tx - Med/Surg	$1.4M	6%
	Cancer - Nonspecified	$1.2M	5%
	Coronary Artery Disease	$1.0M	4%
	Cerebrovascular Disease	$0.9M	4%
	All Other	$16.3M	74%

Top Medical Conditions for HCCs in CRY

	Clinical Condition in CY	Net Pay Med	
HCC in CRY and in PRY	Renal Function Failure	$3.3M	12%
	Cancer - Leukemia	$1.6M	6%
	Cardiovasc Disord, Congenital	$1.3M	4%
	Lipid Disorders	$1.3M	4%
	Chemotherapy Encounters	$1.2M	4%
	All Other	$19.9M	70%
HCC in CRY only; CE in PRY	Cerebrovascular Disease	$3.5M	5%
	Cancer - Breast	$3.1M	5%
	Chemotherapy Encounters	$2.9M	4%
	Coronary Artery Disease	$2.7M	4%
	Spinal/Back Disord, Low Back	$2.5M	4%
	All Other	$51.0M	78%
HCC in CRY only; Not CE in PRY	Newborns, w/wo Complication	$3.9M	25%
	Neurological Disorders, NEC	$1.1M	7%
	Cardiovasc Disord, Congenital	$0.7M	4%
	Gastroint Disord, NEC	$0.6M	4%
	Respiratory Disord, NEC	$0.6M	4%
	All Other	$8.6M	56%

CE = Continuously Enrolled in Self-Insured Medical Plan with Active status for 12 months

TRUVEN HEALTH ANALYTICS

HIGH COST CLAIMANTS YEAR-TO-YEAR: FY `13 - FY `14

Did the percent of medical spend related to chronic conditions differ between repeat and new HCCs?

- Both repeat HCCs and new HCCs in the CRY who had been enrolled for the entire PRY had over 70% of their CRY medical net payments for chronic conditions
- New HCCs in the CRY who had not been enrolled the entire PRY had less than half (48%) of their CRY medical costs for chronic conditions

Top Medical Conditions for HCCs in PRY

	Clinical Condition in PRY	Net Pay Med	
HCC in CY and in PRY	Renal Function Failure	$1.7M	8%
	Cancer - Nonspecified	$1.1M	6%
	Hematologic Disord, Congenital	$1.0M	5%
	Chemotherapy Encounters	$1.0M	5%
	Cancer - Leukemia	$1.0M	5%
	All Other	$14.2M	71%
HCC in PY only; CE in CRY	Coronary Artery Disease	$3.1M	8%
	Newborns, w/wo Complication	$2.6M	7%
	Cancer - Breast	$2.0M	5%
	Cardiac Arrhythmias	$2.0M	5%
	Condition Rel to Tx - Med/Surg	$1.8M	5%
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	Infections, NEC	$1.4M	6%
	Cancer - Nonspecified	$1.4M	6%
	Condition Rel to Tx - Med/Surg	$1.2M	5%
	Renal Function Failure	$1.0M	4%
	All Other	$18.0M	73%

Top Medical Conditions for HCCs in CRY

	Clinical Condition in CY	Net Pay Med	
HCC in CRY and in PRY	Renal Function Failure	$2.2M	12%
	Lipid Disorders	$1.2M	7%
	Hematologic Disord, Congenital	$1.0M	5%
	Neurological Disorders, NEC	$0.9M	5%
	Chemotherapy Encounters	$0.9M	5%
	All Other	$11.9M	66%
HCC in CRY only; CE in PRY	Coronary Artery Disease	$3.7M	6%
	Cerebrovascular Disease	$2.9M	5%
	Spinal/Back Disord, Low Back	$2.3M	4%
	Cancer - Breast	$2.2M	4%
	Chemotherapy Encounters	$2.1M	4%
	All Other	$46.9M	78%
HCC in CRY only; Not CE in PRY	Newborns, w/wo Complication	$4.7M	26%
	Cardiovasc Disord, Congenital	$3.6M	20%
	Musculosk Disord, Congenital	$1.3M	7%
	Tumors - Central Nervous Sys	$0.7M	4%
	Respiratory Disord, NEC	$0.6M	3%
	All Other	$7.2M	40%

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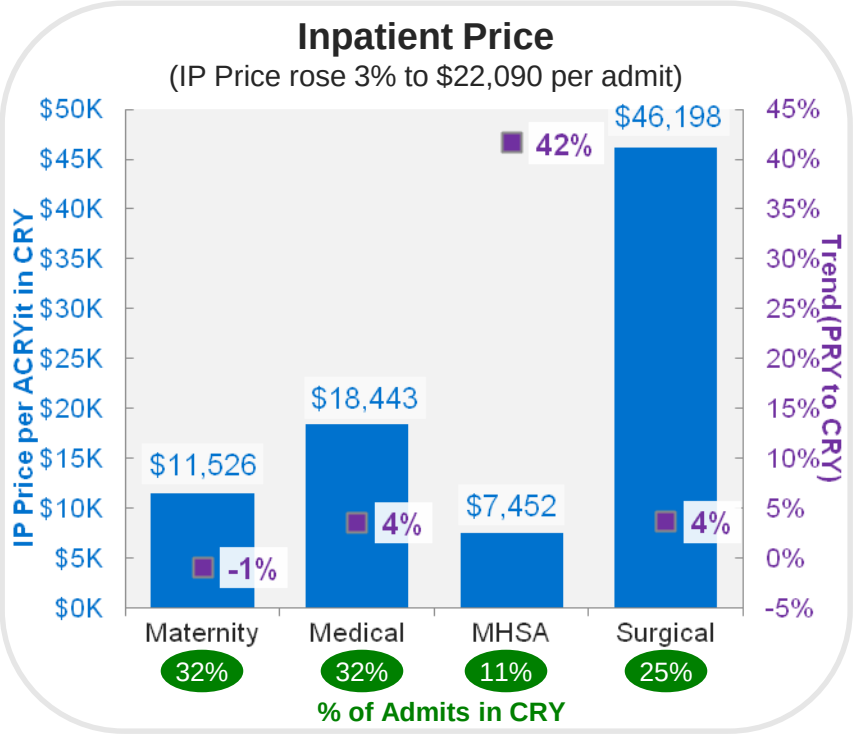
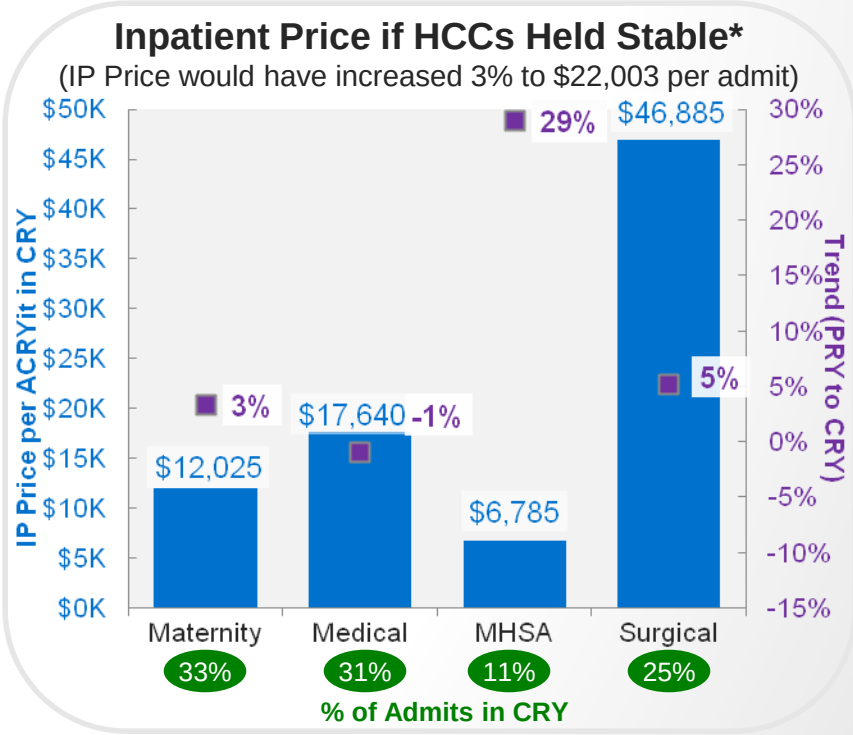
TRUVEN HEALTH ANALYTICS

INPATIENT PRICE





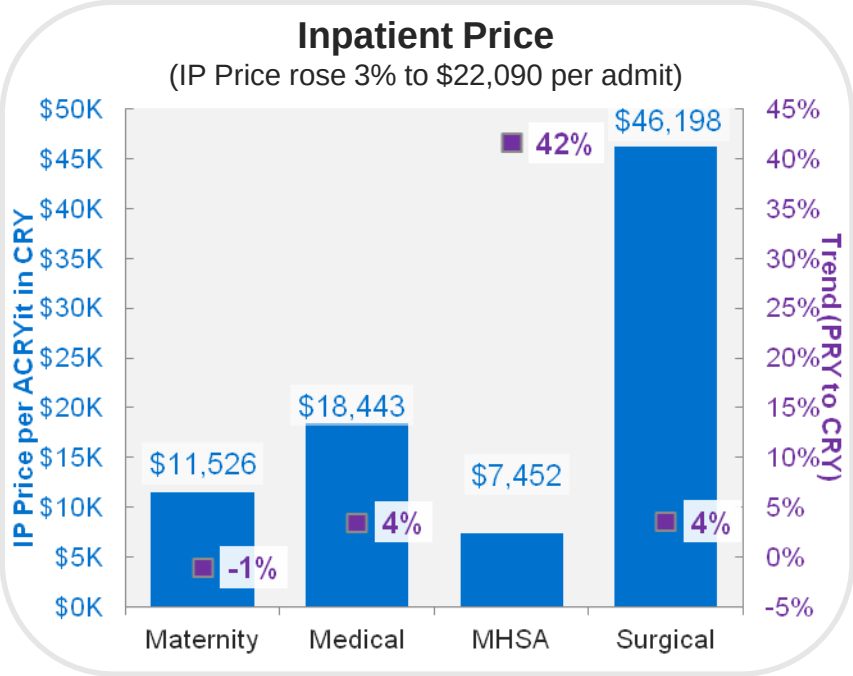
What were the primary drivers of the 3% increase in inpatient (IP) price per admission?

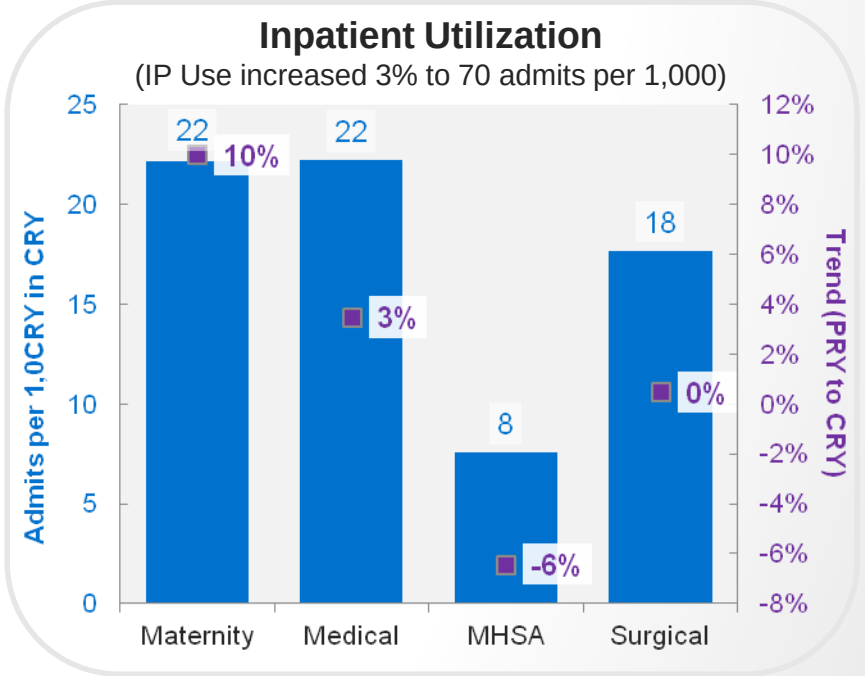
- High cost claimants (HCCs) accounted for one percentage point of the IP price increase
- After holding HCCs stable, surgical admissions becomes the primary driver of the IP price increase, followed by MHSA; MHSA had a higher trend than surgical admissions but a lower volumne

*If HCC prevalence had remained stable as well as IP price and use rates for the HCCs

TRUVEN HEALTH ANALYTICS

INPATIENT EXPERIENCE



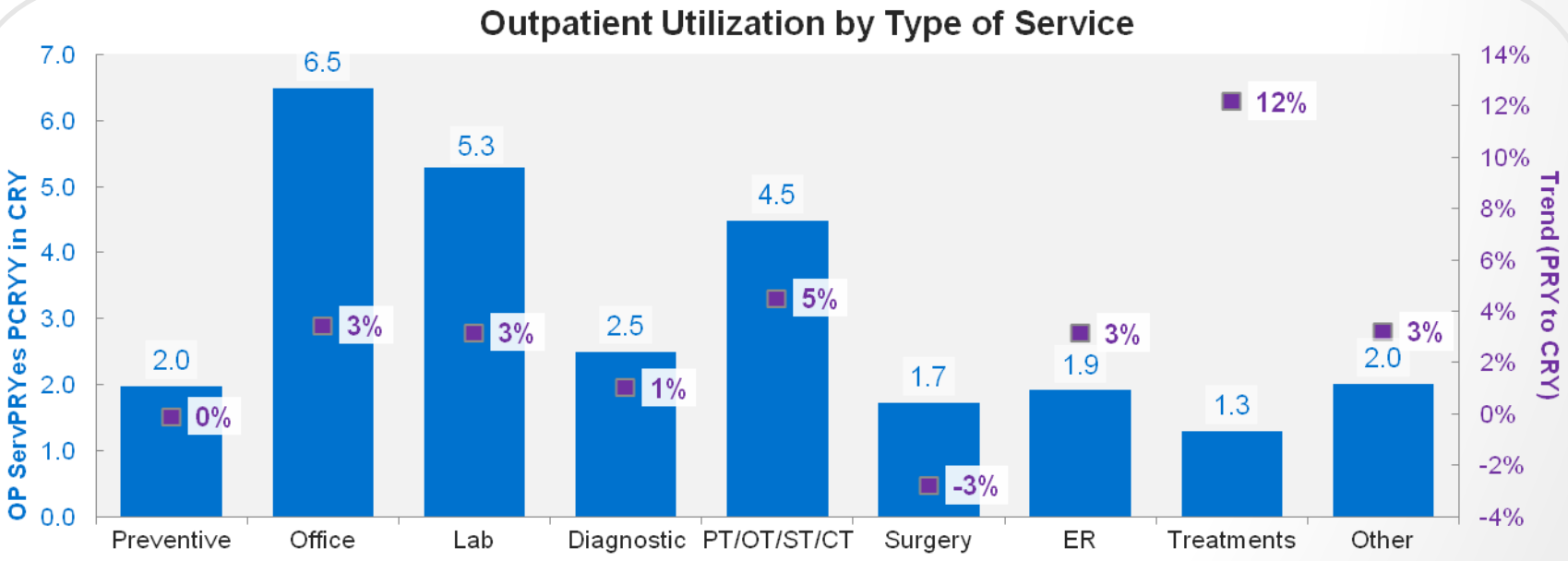


What were the primary drivers of the 3% increase in inpatient price per admission and the 3% increase in admission rate?

- The 3% increase in inpatient price was driven by surgical, driven primarily by Musculoskeletal surgical admissions
- The admission rate declined for MHSA

TRUVEN HEALTH ANALYTICS

OUTPATIENT UTILIZATION



Preventive: preventive visits, immunizations, blood pressure tests, screenings (e.g., mammograms, colonoscopies), lipid tests, etc.
Office: office visits not included in preventive
Lab: lab services not included in preventive

Diagnostic: radiology and other diagnostic services (e.g., EKG, echocardiogram, spirometry) not in preventive
PT/OT/ST/CT: physical therapy, occupational therapy, speech therapy, and chiropractic therapy
Surgery: surgical services not included in preventive

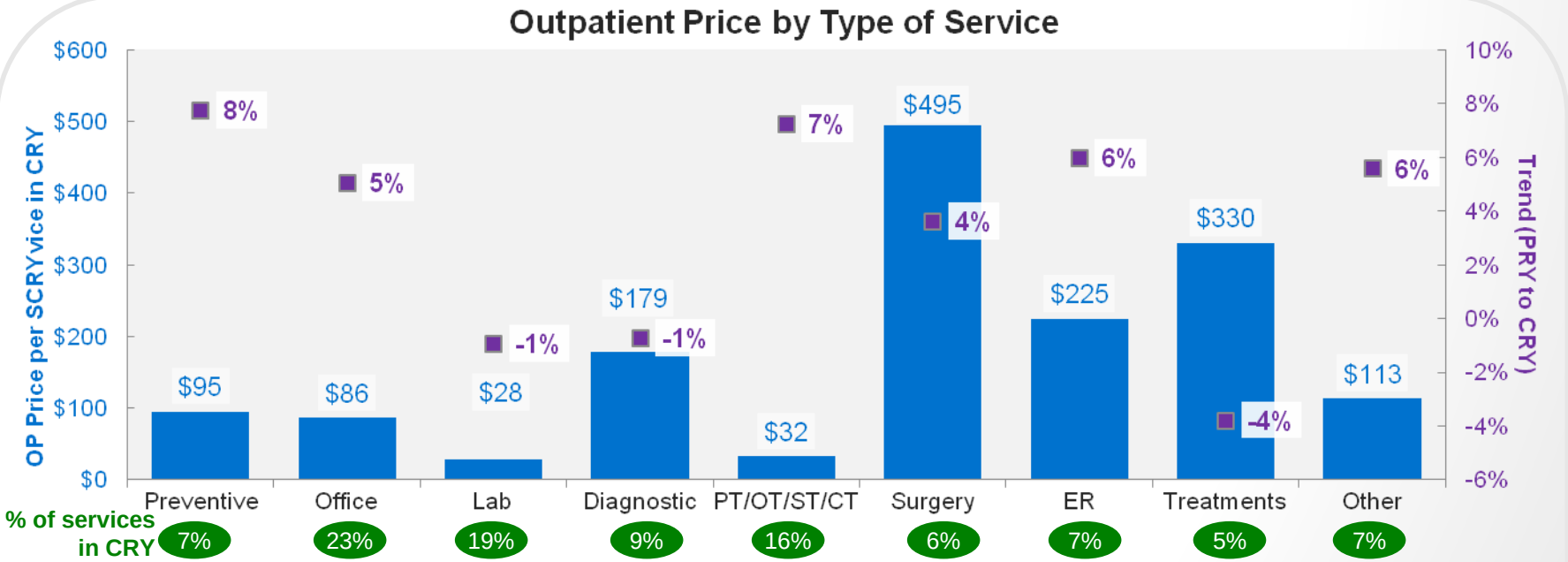
ER: emergency room
Treatments: dialysis, specialty drugs, OP pharmacy, and injections not in preventive
Other: DME, medical supplies/devices, home health, minor procedures (e.g., skin lesion biopsy), etc.

What were the primary drivers of the 3% increase in outpatient utilization (to 27.7 services PEPY)?

- Office and PT/OT/ST/CT services accounted for two percentage points increase of the overall 3% increase in outpatient utilization trend

TRUVEN HEALTH ANALYTICS

OUTPATIENT PRICE



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ER: emergency room
Treatments: dialysis, specialty drugs, OP pharmacy, and injections not in preventive
Other: DME, medical supplies/devices, home health, minor procedures (e.g., skin lesion biopsy), etc.

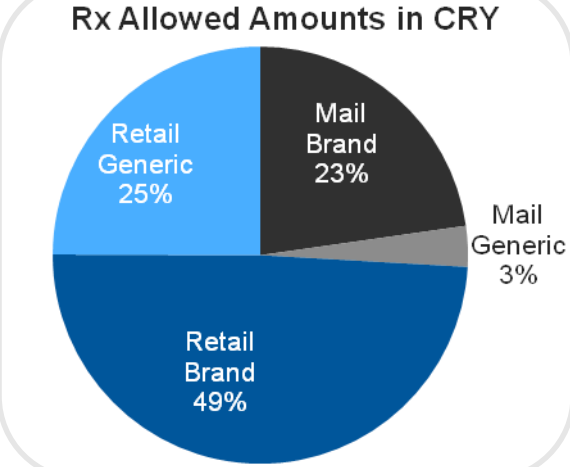
What were the primary drivers of the 2% increase in outpatient price (to $124 per service)?

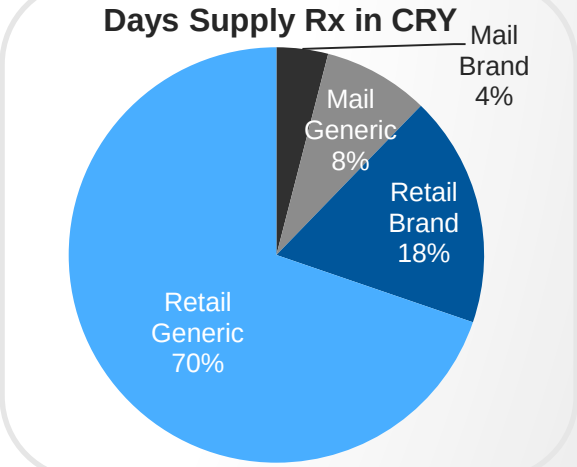
- Surgery and Office services accounted for one percentage point of the 2% outpatient price trend
- Surgery price increased 4%, driven in part by high cost claimants (HCCs)—if HCCs had remained stable, Surgery price would have increased 3%
- The price of office services increased 5%, if HCCs had remained stable, the price of office services would have increased 4%

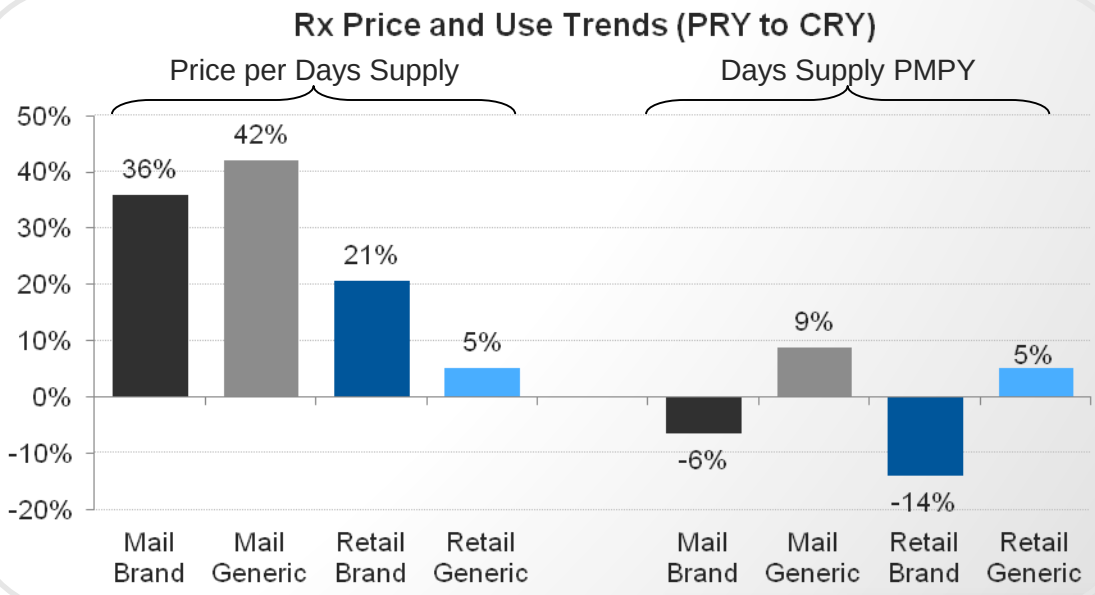
PRESCRIPTION DRUG EXPERIENCE

What were the primary drivers of the 10% increase in prescription drug price?

- The prescription drug price trend was driven primarily by high cost claimants (HCCs)—if HCC experience had remained stable, the overall Rx price increase would have been 5% instead of 10%
- Overall prescription drug price was favorably impacted by increased generic utilization in the CRY—generic fills accounted for 78% of days supply, up three percentage points from the PRY







TRUVEN HEALTH ANALYTICS

KEY FINDINGS AND OPPORTUNITIES

- If you don't take into account High Cost Claimants, Prescription Drug price is the biggest driver of trend.
- Drug cost for "Retail Brand" and Mail Brand" was significantly high and accounted for 72% of the "Rx Allowed Amounts in CRY"
  - Investigate opportunities to increase Generic and Mail Order use
  - A review of place of service for specialty drugs may show also opportunities for lower cost service locations.
- A 21% increase in High Cost Claimants significantly impacted the overall trend
  - CRY: Renal Failure $5.5M; Newborn, w/wo Complications $4.8M
- Inpatient and Outpatient Use were secondary drivers of trend

More Than Data. **Answers.**