

Understanding and impacting medical expense

NCIOM New Models of Care Workgroup

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An independent licensee of the Blue Cross and Blue Shield Association

Objectives

- List key drivers of medical expense for a commercially insured population
- Identify windows through which medical expense may be viewed and demonstrate sources of variation in medical expense patterns
- List and describe models of care that have potential to impact medical expense trends

Key take home messages

- Current medical expense trends are unsustainable
- Medical expense is a complex, multi-focal issue
- For commercial insured, NC medical expense is higher than benchmarks, largely due to lifestyle choices and cost per unit of care
- New models of care have the potential to reduce redundancy, inefficiency, and ineffectiveness of care

Key drivers of medical expense

- Increased prevalence of treated disease
- Redefinition of disease
- Typical cost to treat a disease/condition
- Technology
- Redundancy, inefficiency, ineffectiveness

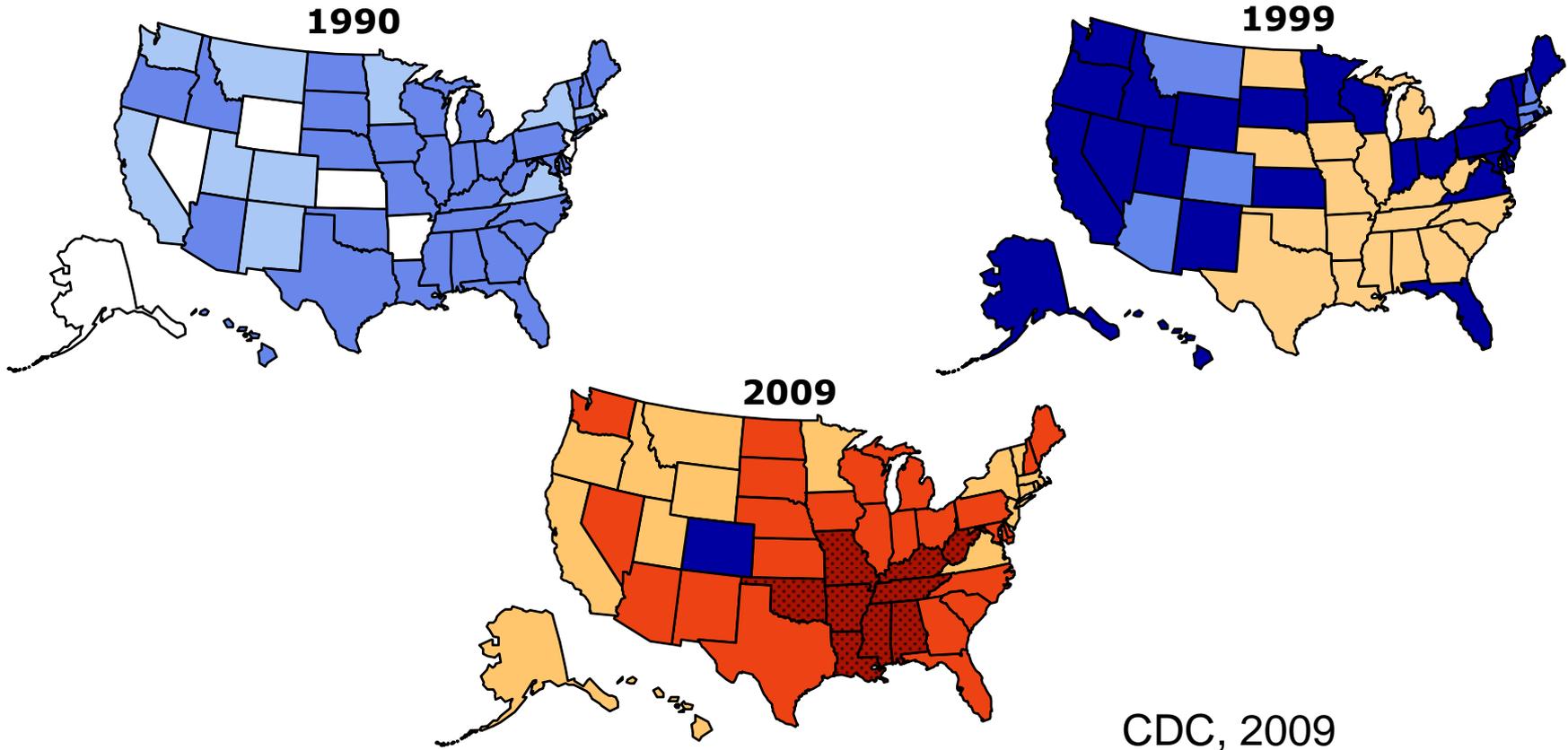
Increased prevalence of treated disease

- Lifestyle
- Some correlation to age

Obesity Trends* Among U.S. Adults

BRFSS, 1990, 1999, 2009

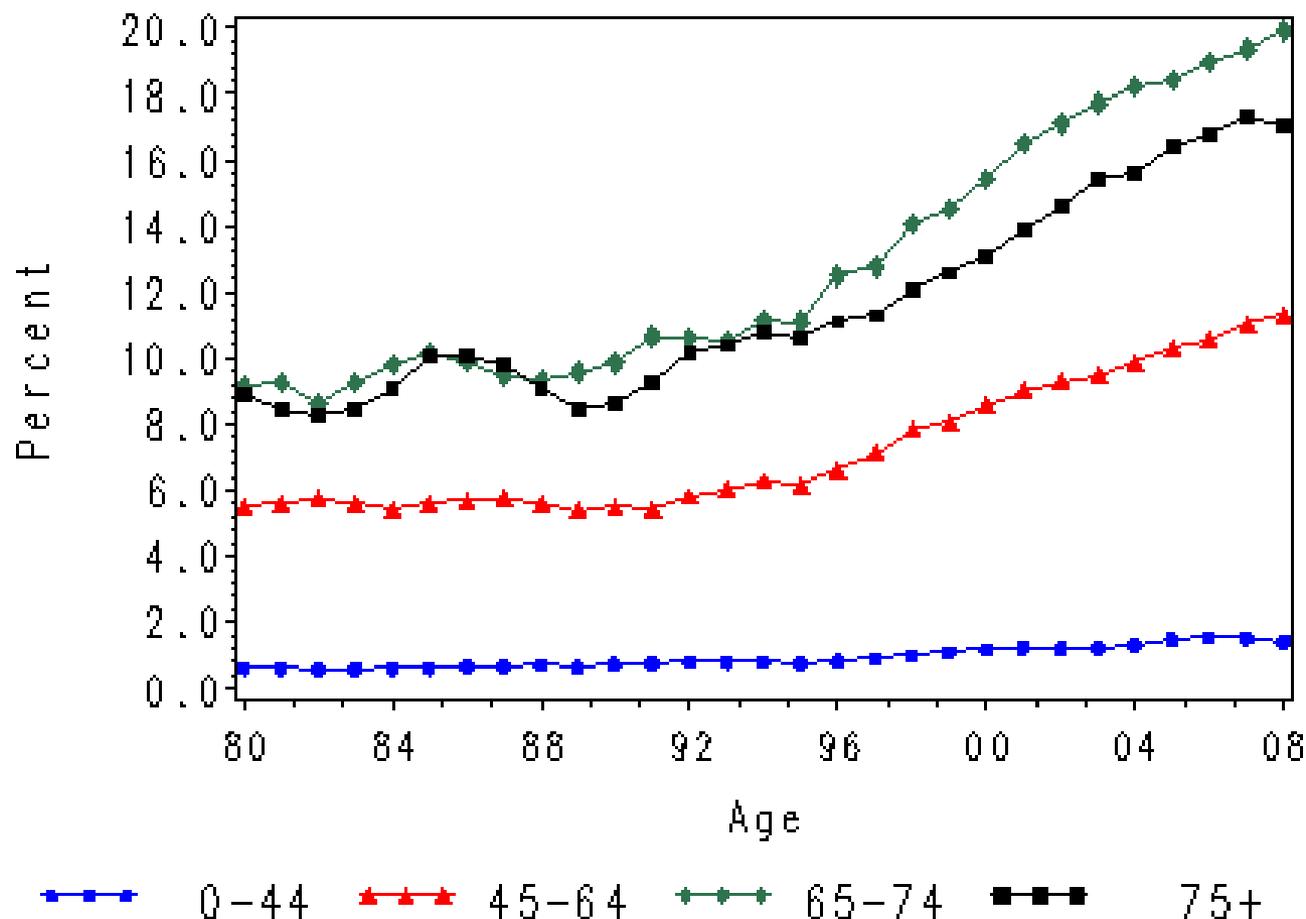
(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



CDC, 2009

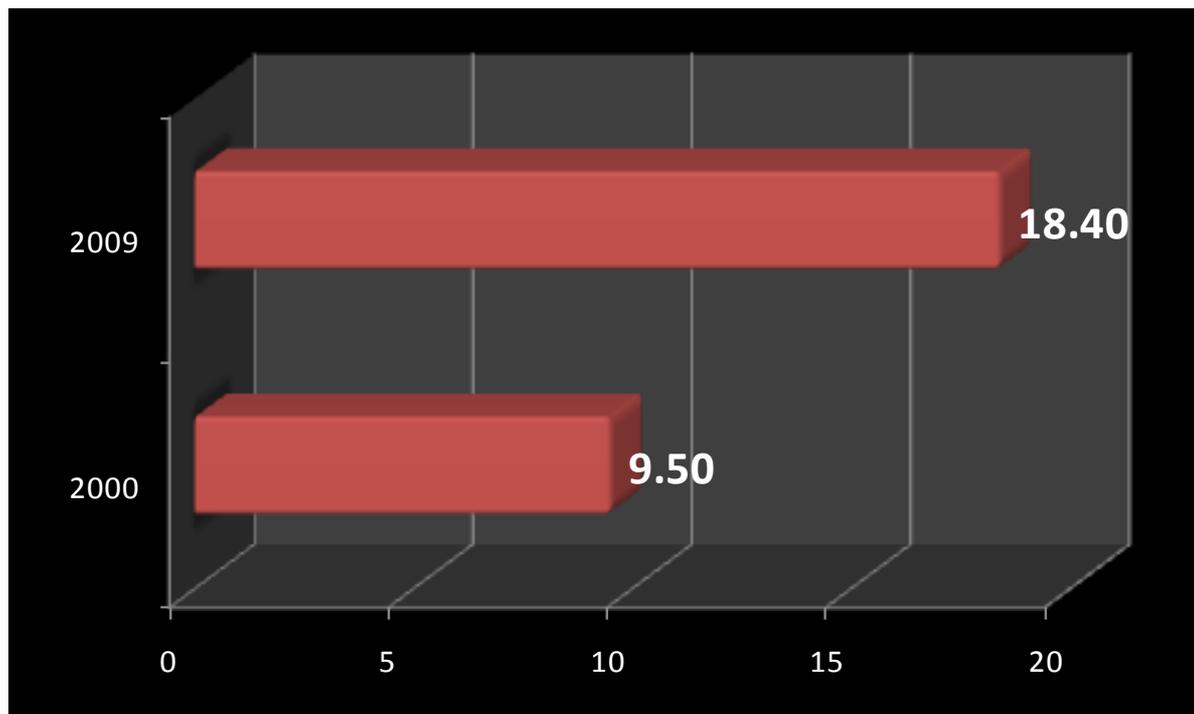


Prevalence of Diabetes, 1980-2008



CDC, 2009

Cases Per 10,000 Knee Replacement Surgery 2000 – 2009



Knee Replacement Surgery has increase 94% since 2000

Redefinition of disease

- Diabetes, hypertension, hyperlipidemia
- Indications for diagnostics, procedures
- ADD, ED, varicosities

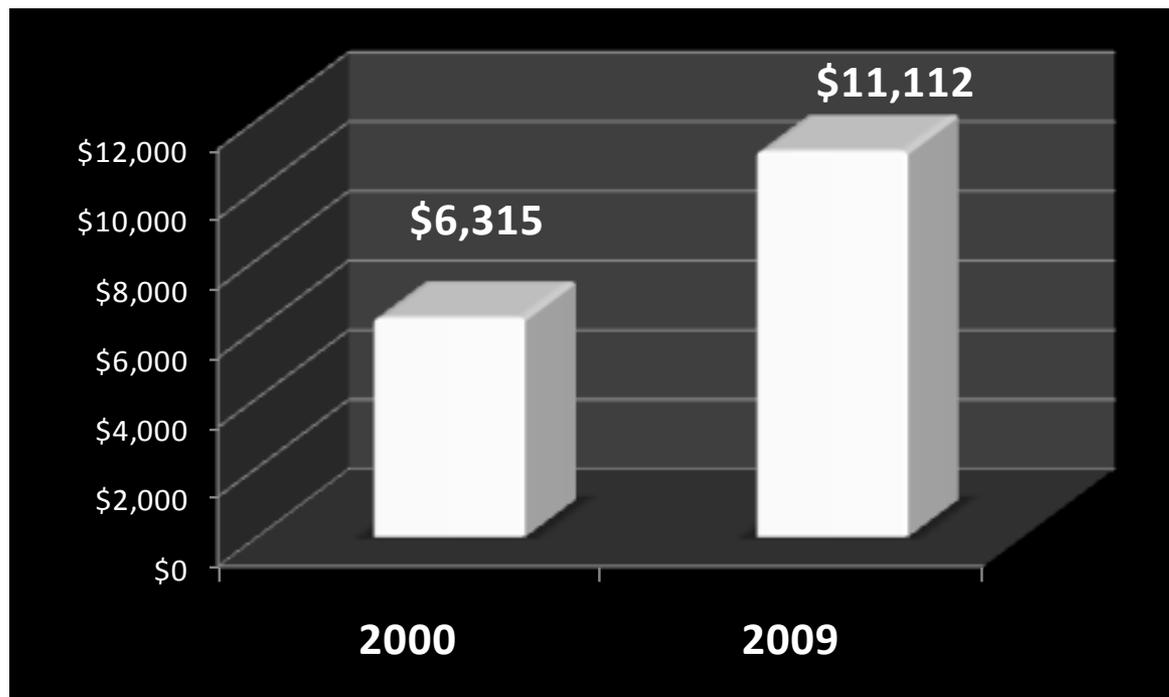


Typical cost to treat a disease/condition

- Price versus utilization
- Geographic variation

Trend in Average Cost of Influenza* 2000 – 2009

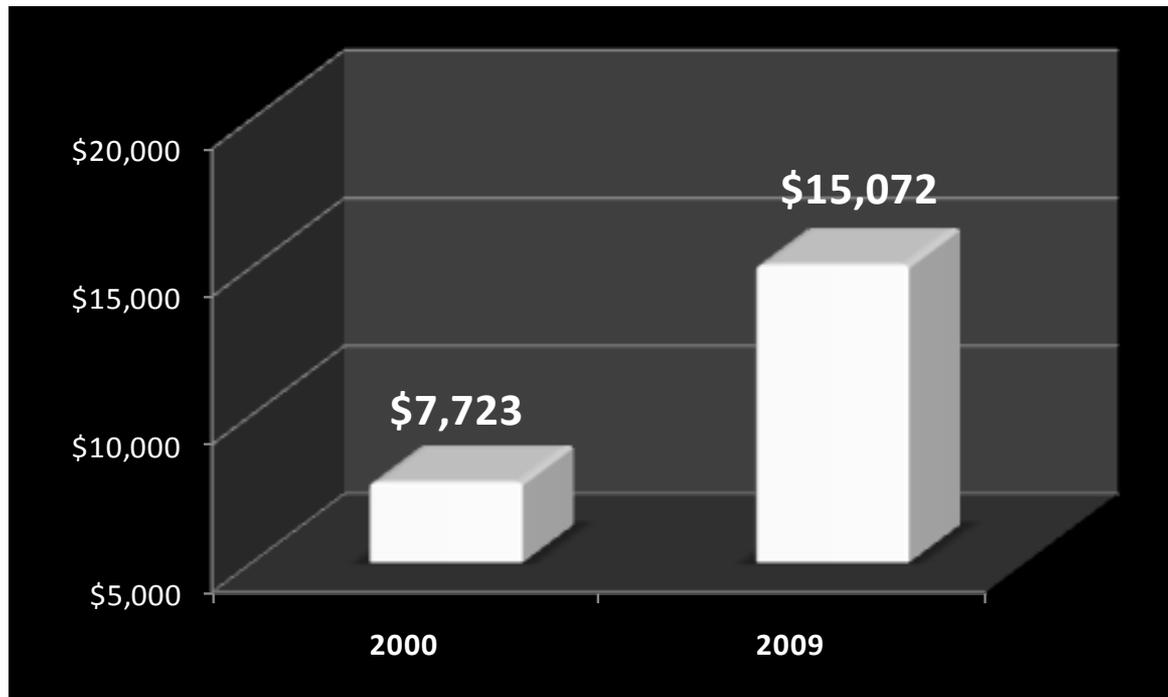
*For cases resulting in hospitalization



Increase in cost is 76% since 2000

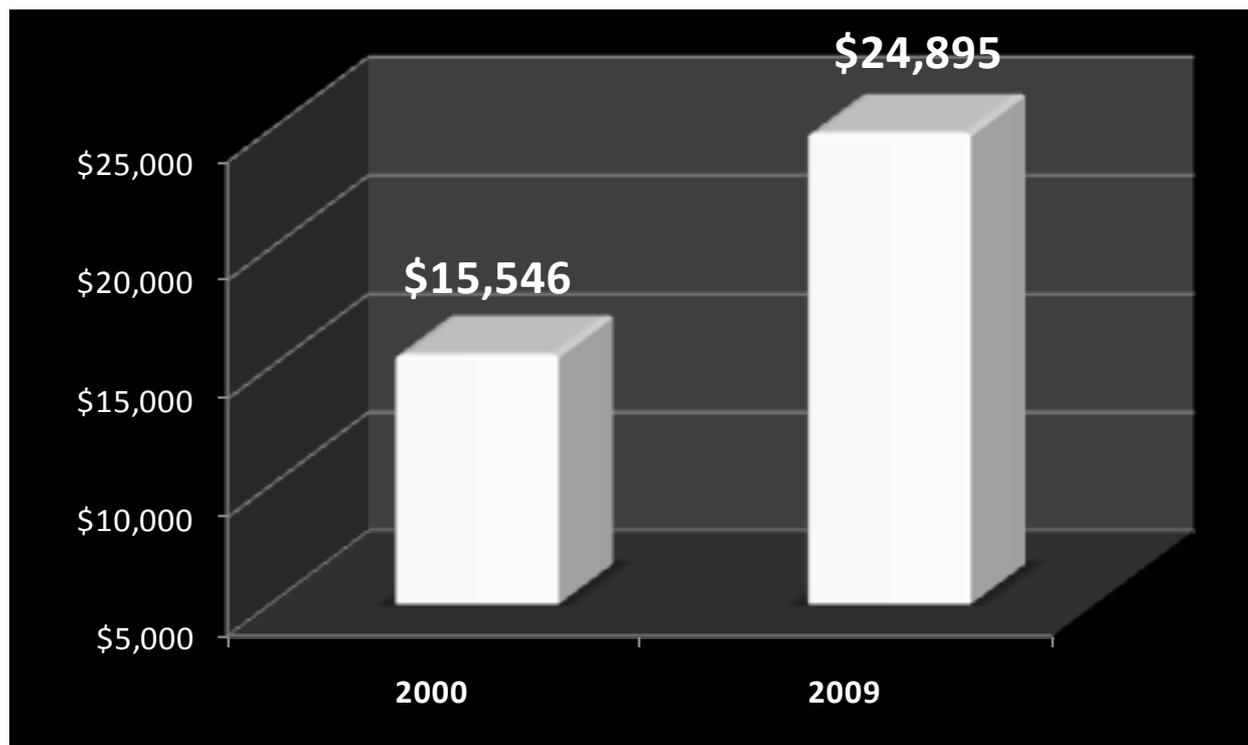
Draft - Confidential

Trend in Average Cost for Inpatient Appendectomy Surgery 2000 – 2009



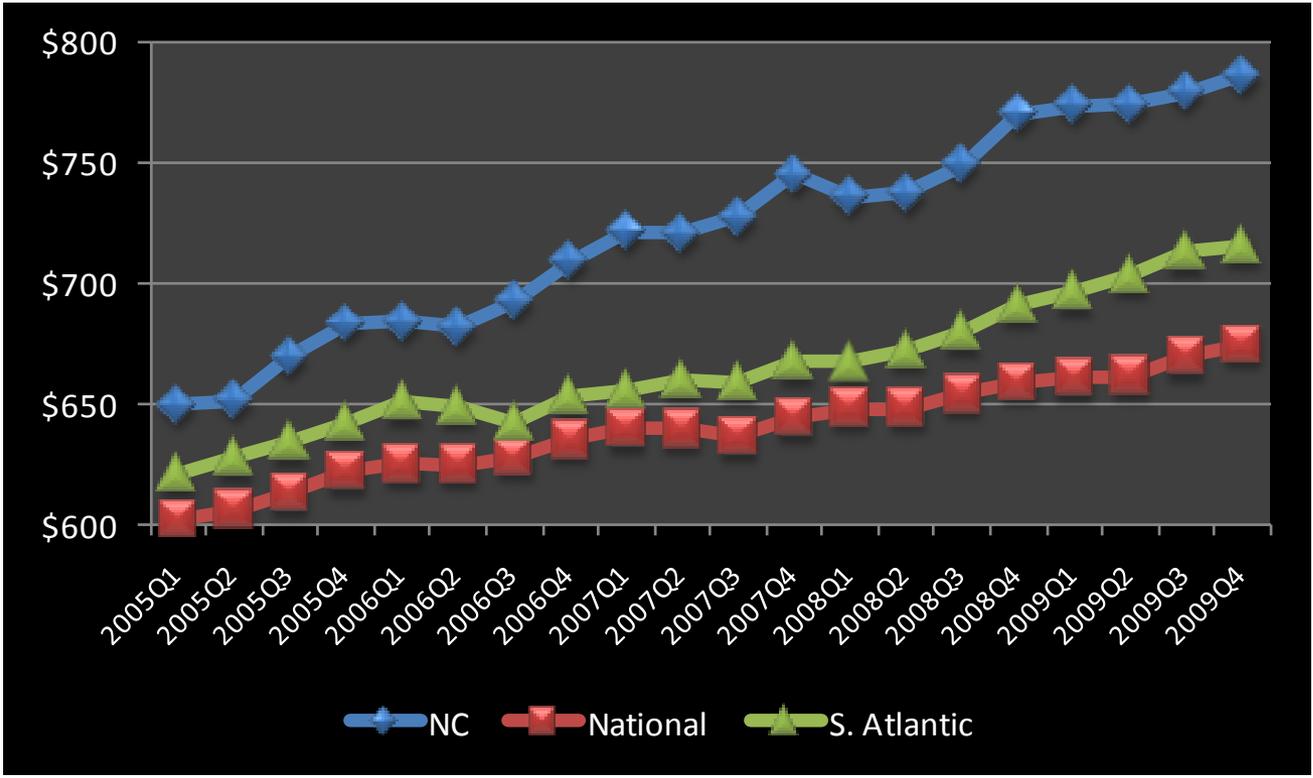
Average cost increased 95%.

Trend in Average Cost for Knee Replacement Surgery 2000 – 2009



Average cost increased 60%.

Allowed Per Service – MRI



NC Consistently Exceeds Benchmarks. Gap is increasing

Outpatient Surgery

			% Diff
	NC	S. Atlantic	from Benchmark
Visits/1000	108.8	249.9	-56.5%
Allowed/Visit	\$2,848	\$1,240	129.7%
Services/Visit	30.4	9.4	223.4%

- NC has far more services rendered per surgical visit than benchmark leading to a much higher overall allowed per surgical visit.
- Outpatient PMPM will rise significantly if outpatient surgery use increases.

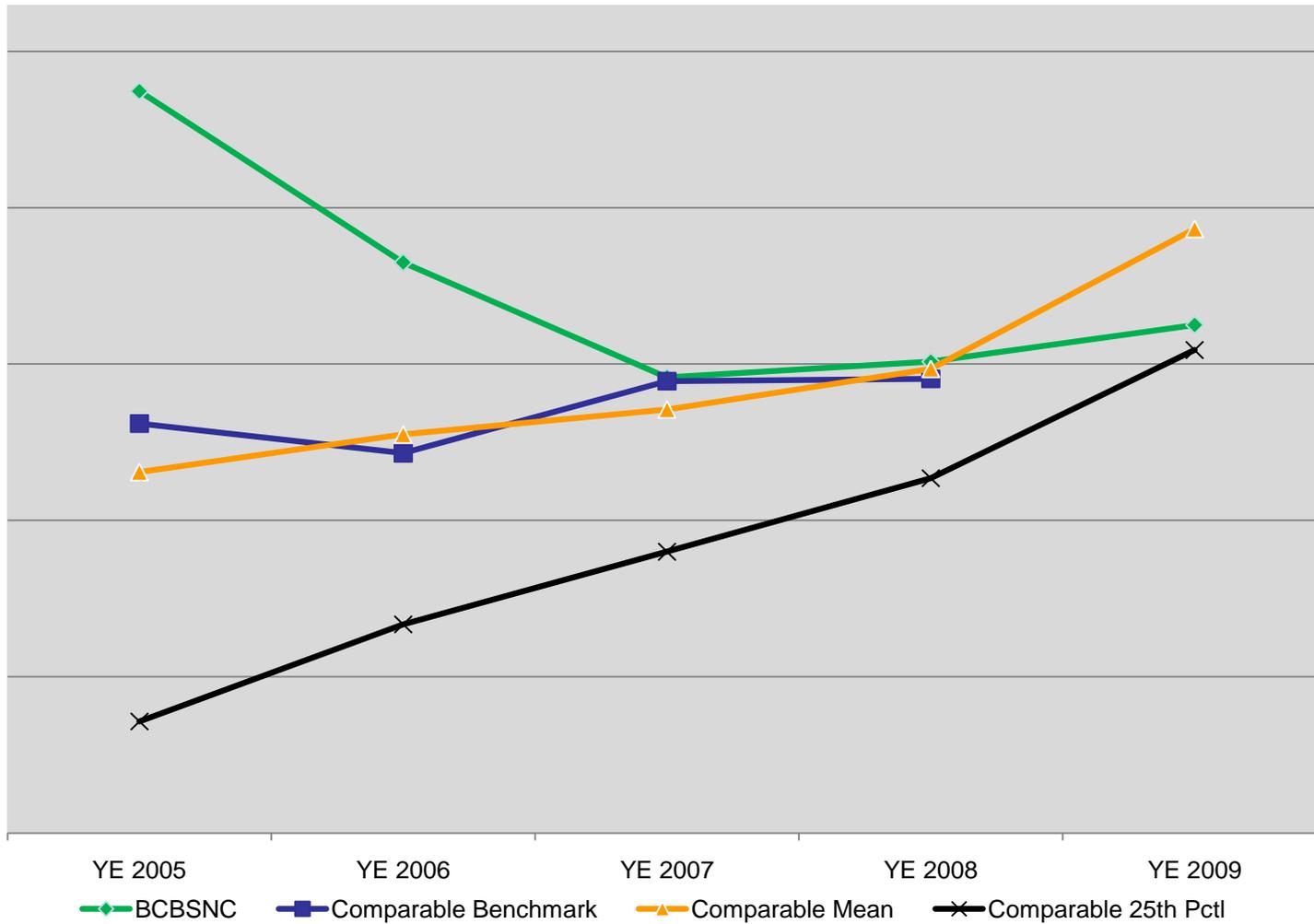
Technology

- Imaging
- Pharmaceuticals
- Biological therapeutics
- Genomics, personalized medicine
- Medical devices

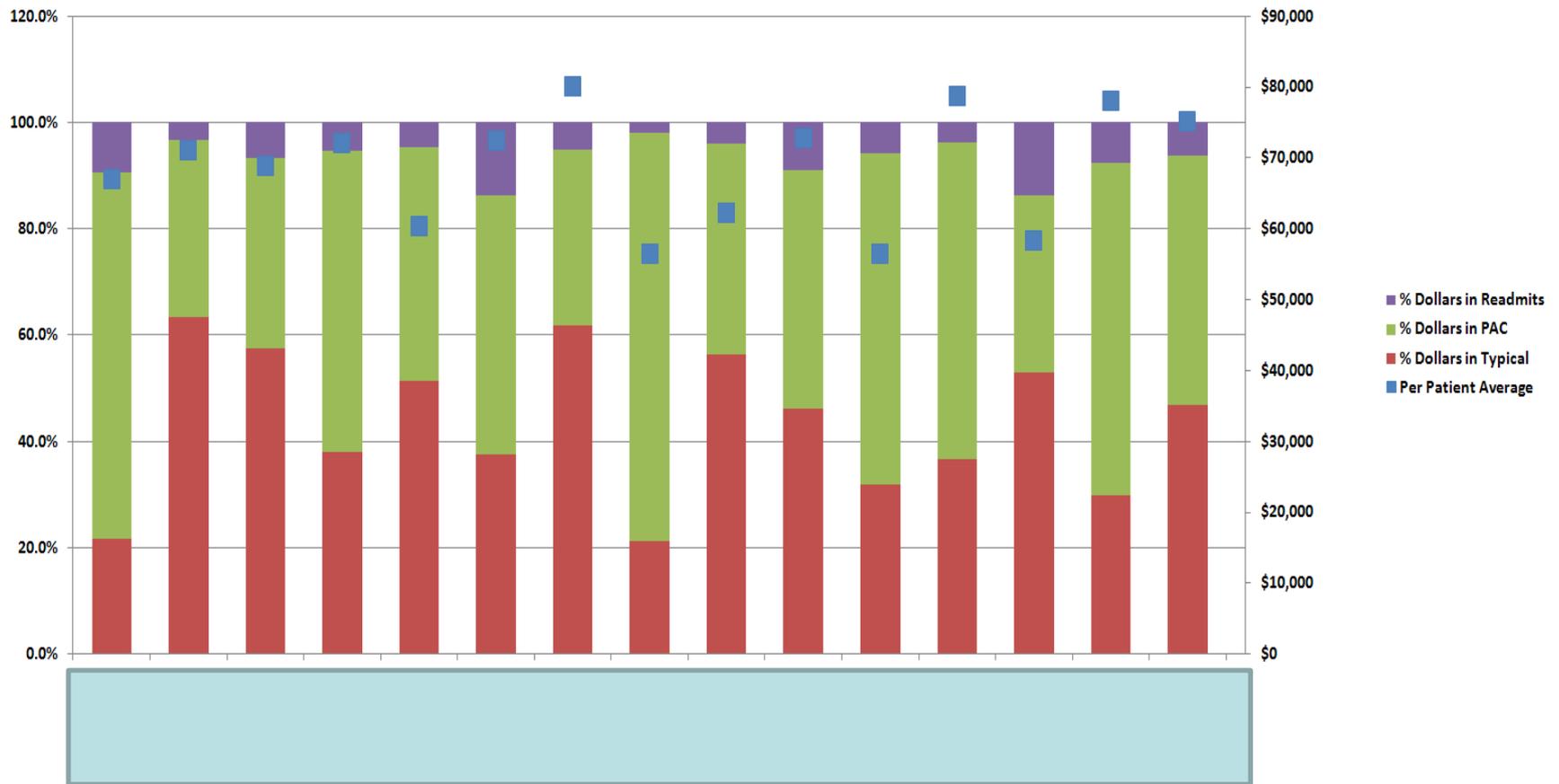
Redundancy, inefficiency, ineffectiveness

- Administrative costs
- Maldistribution of providers (geographic, specialty type)
- Maldistribution of care (prevention vs. sick care)
- Disintegrated care (HIE, EMR)
- Lack of evidence-based care, comparative effectiveness
- Conflated business models for care delivery of care
- Defensive medicine
- Fraud and abuse

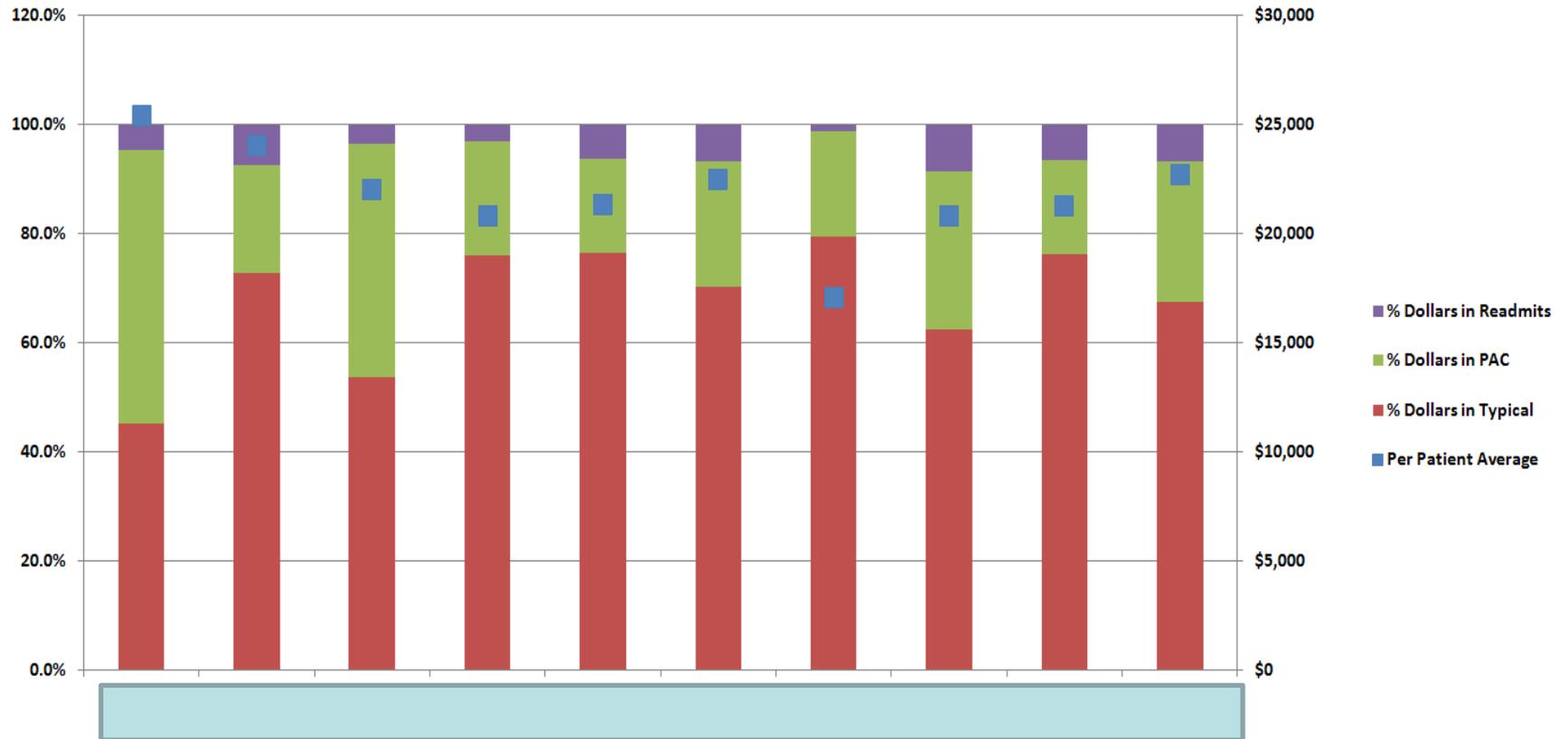
Administrative cost PMPM 2005-2009



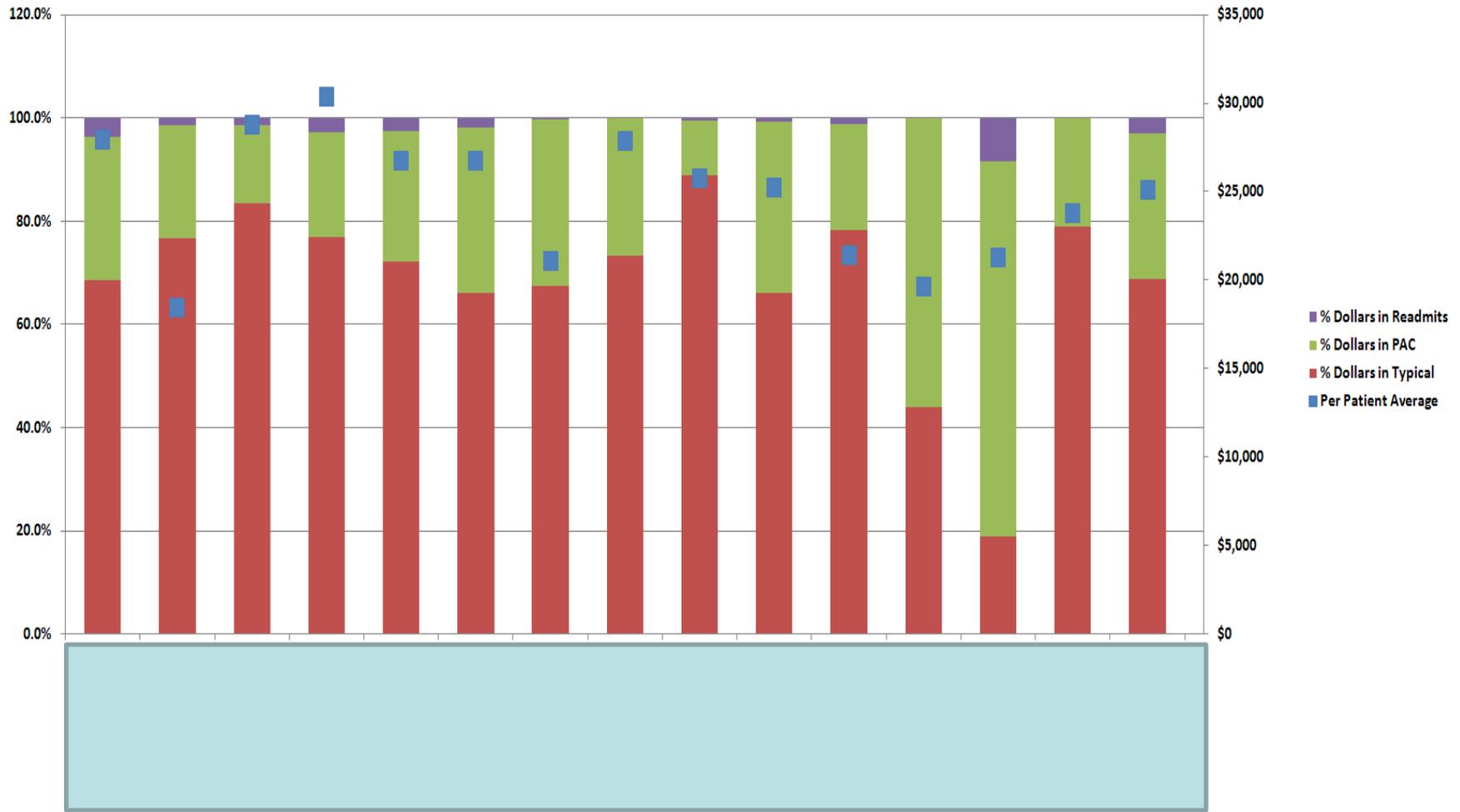
CABG Episode Cost Summary (DOS: 1/1/07 – 12/31/09)



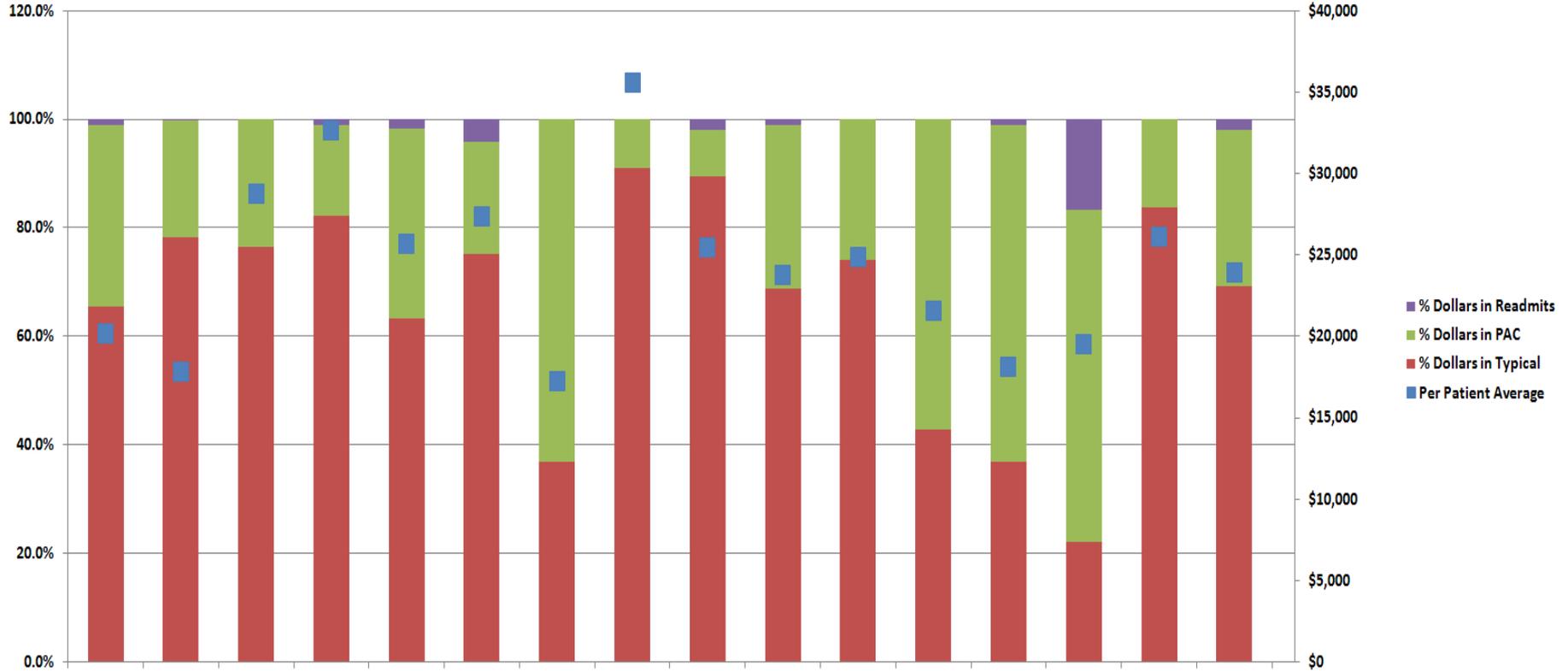
Bariatric Surgery Episode Cost Summary (DOS: 1/1/07 – 12/31/09)



Knee Replacement Episode Cost Summary (DOS: 1/1/07 – 12/31/09)



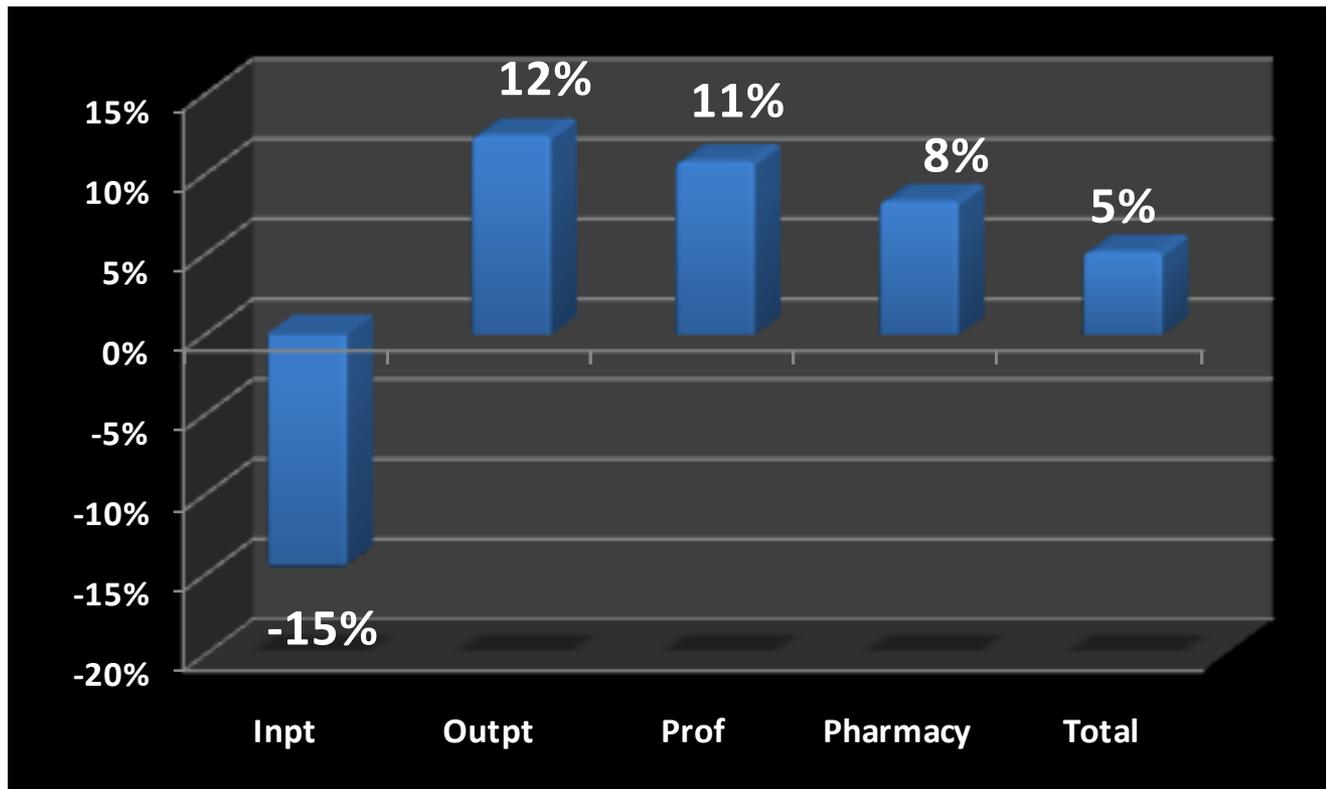
Hip Replacement Episode Cost Summary (DOS: 1/1/07 – 12/31/09)



Windows for medical expense

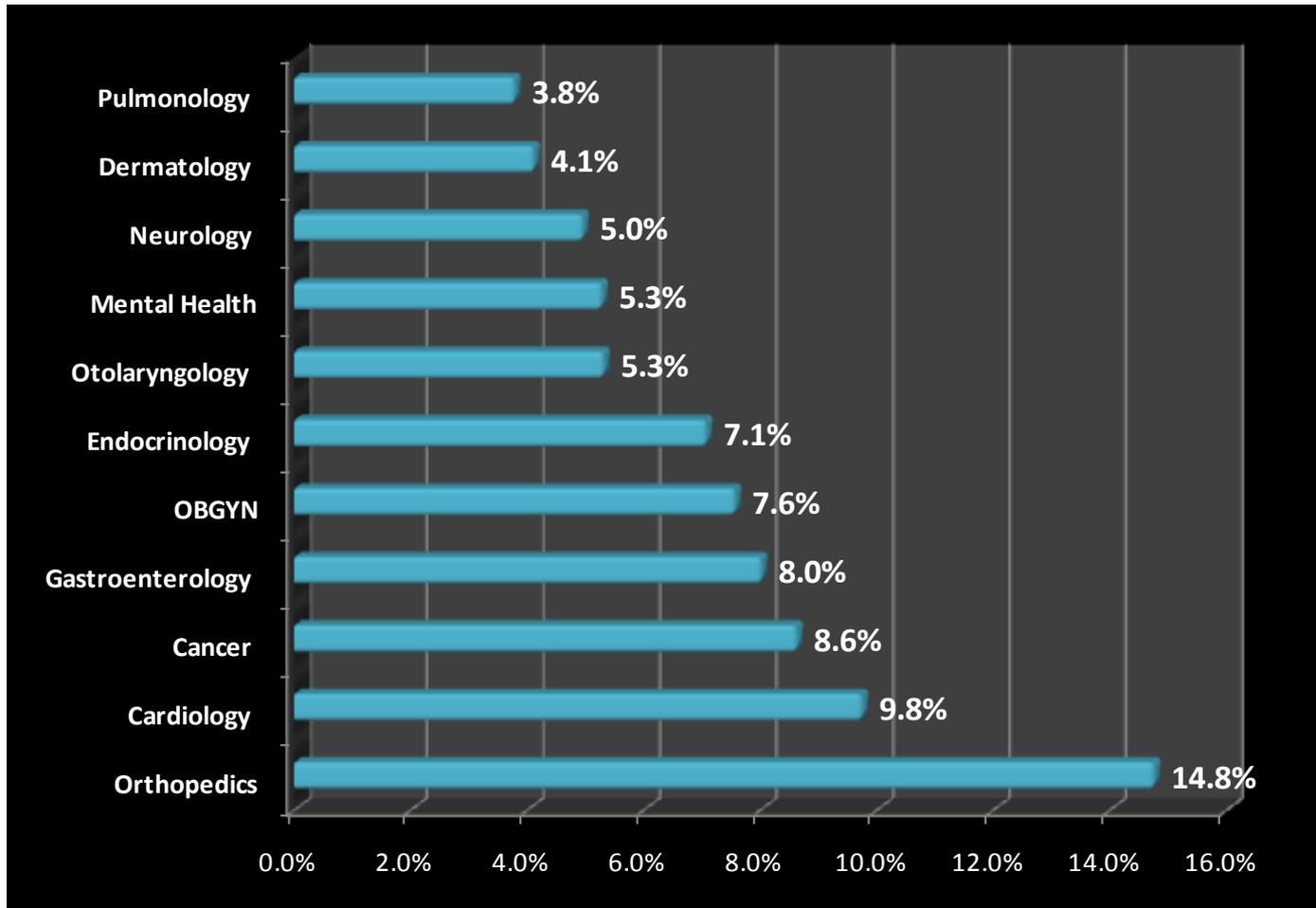
- Type of service
- Major diagnostic categories
- Episodes of treatment
- Provider
- Patient/member; group; line of business
- Geography

2009 Percent Difference in NC PPO Allowed PMPM Compared to S. Atlantic Division PPO by Type of Service



PMPM excluding inpatient is 11% above benchmark

Distribution of Disease Classes With 80% of Total Costs - 2009

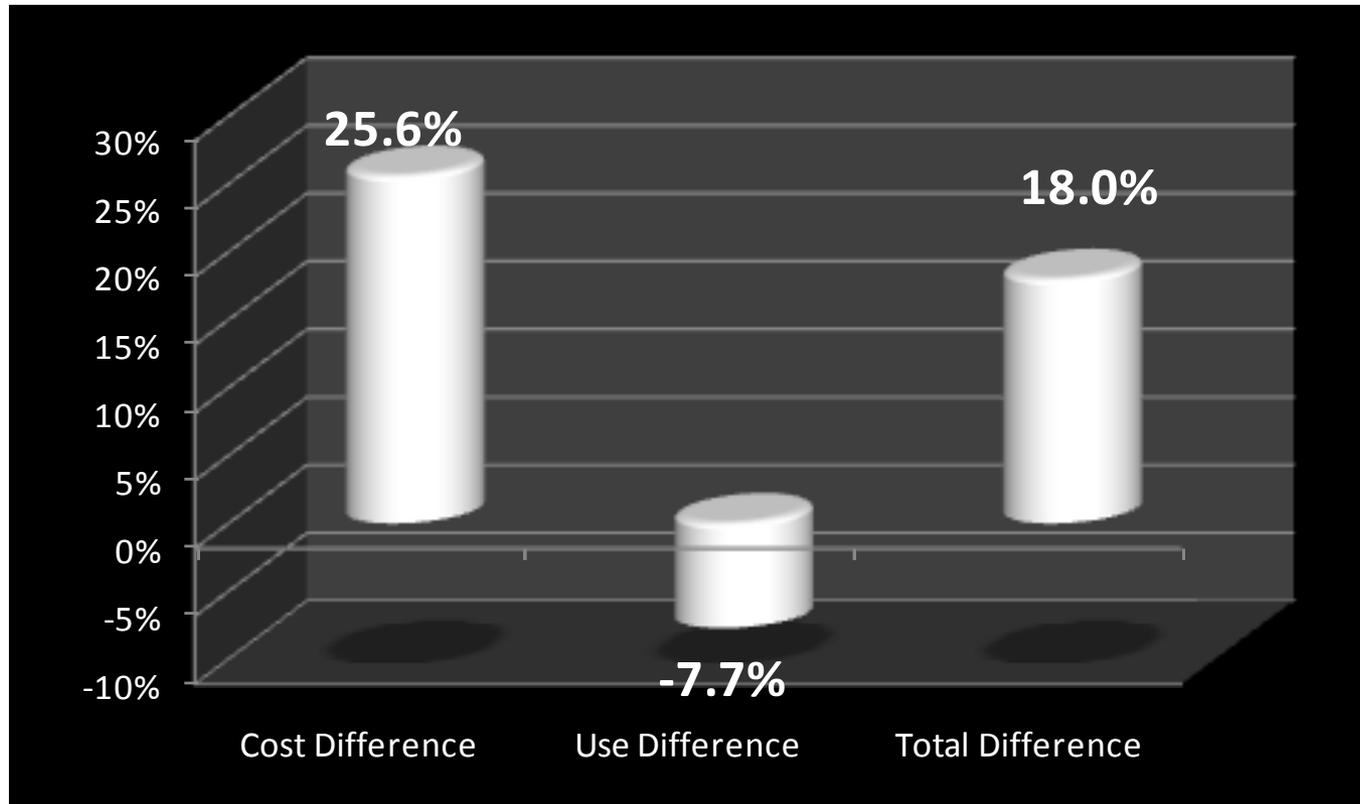


Top 20 Diseases/Services Based on % of Total Costs- 2009

Disease	% of Total	Disease	% of Total
Psychiatric Disorders	4.65%	Fractures and dislocations	1.77%
Coronary artery disease	3.94%	Hyperlipidemia	1.62%
Joint degeneration	3.43%	Leukemia	1.46%
Routine Exams	3.00%	Joint derangement	1.30%
Pregnancy	2.70%	Kidney stones	1.10%
Diabetes	2.61%	ESRD	1.00%
Hypertension	2.59%	Asthma	1.00%
Cancer of breast	2.09%	Lung Infections	1.00%
Sinusitis/Rhinitis	1.94%	Tonsils/adenoids	0.92%
GERD	1.86%	Lung Cancer	0.73%

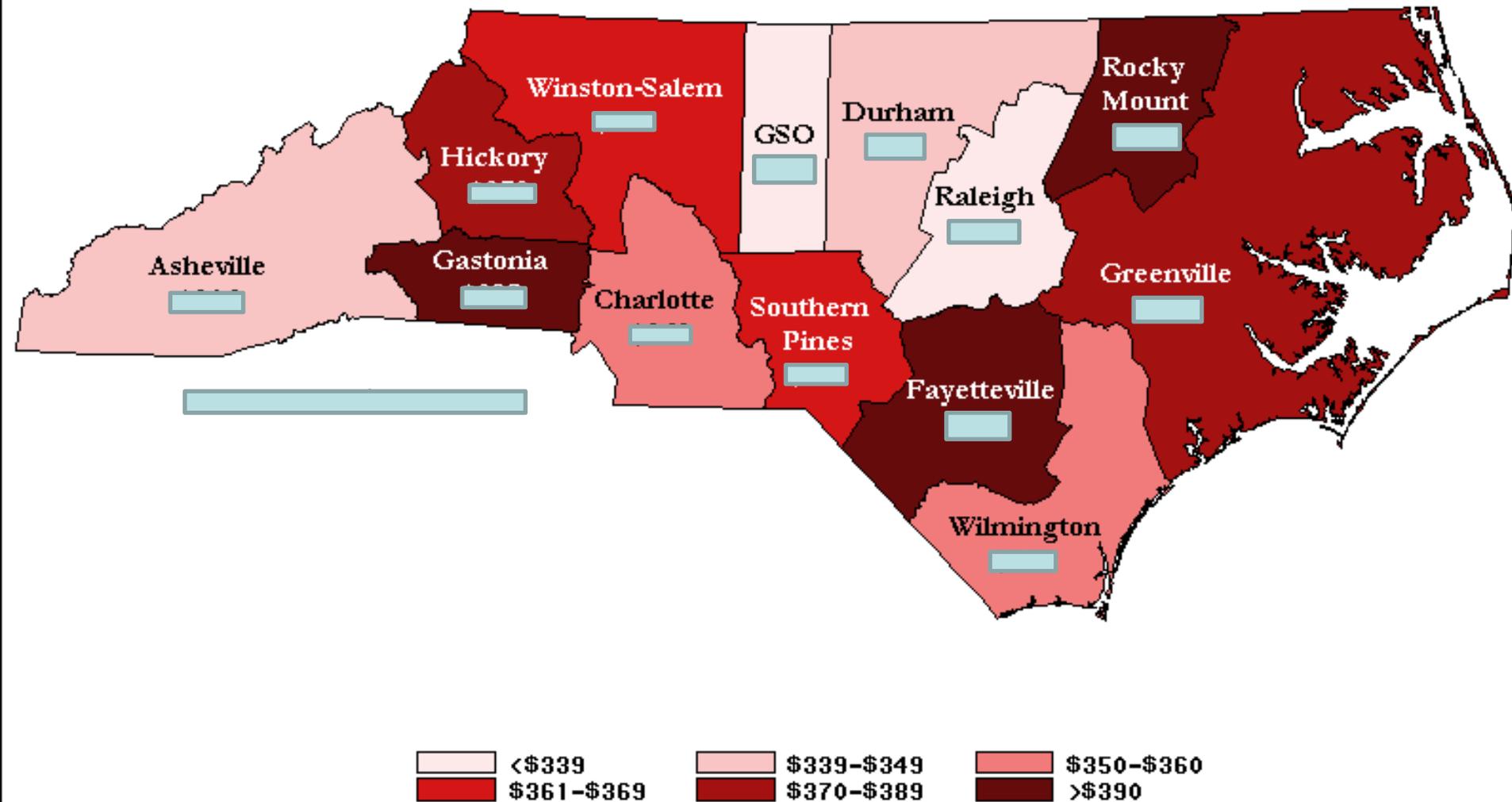
These diseases account for 41% of total costs

Cost and Use Components of Allowed PMPM Difference for Top Outpatient Diagnosis Groups

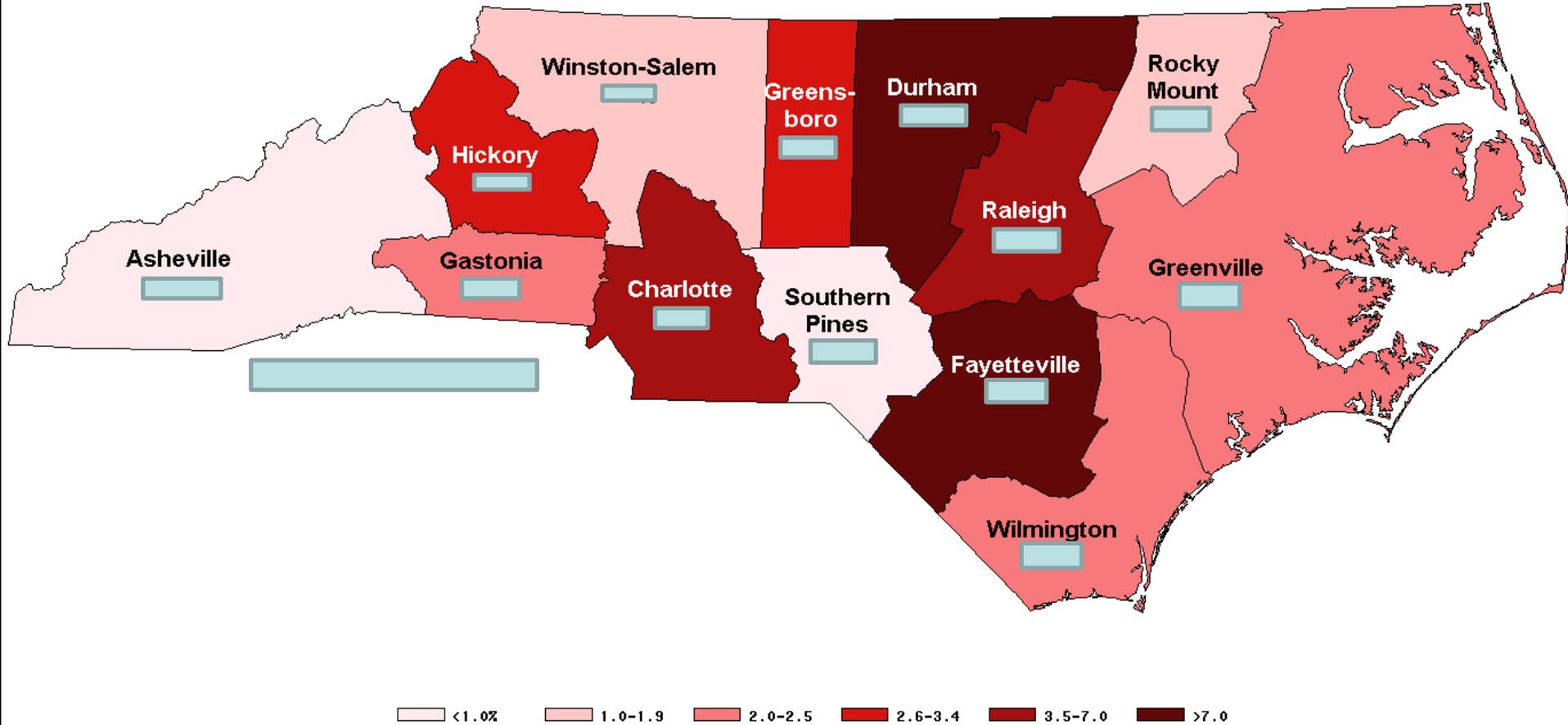


Group Underwritten PMPM by Medical Service Region

January - July 2010

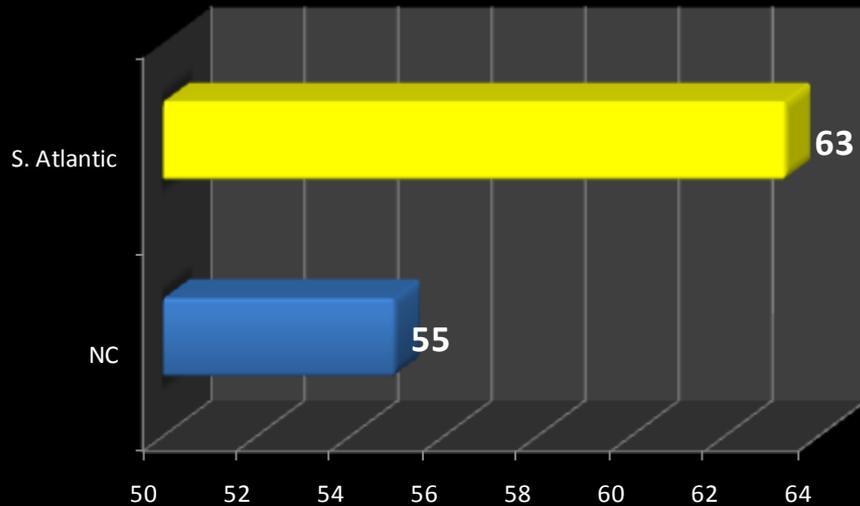


Group Underwritten **Trend** by Medical Service Region
January - July 2010



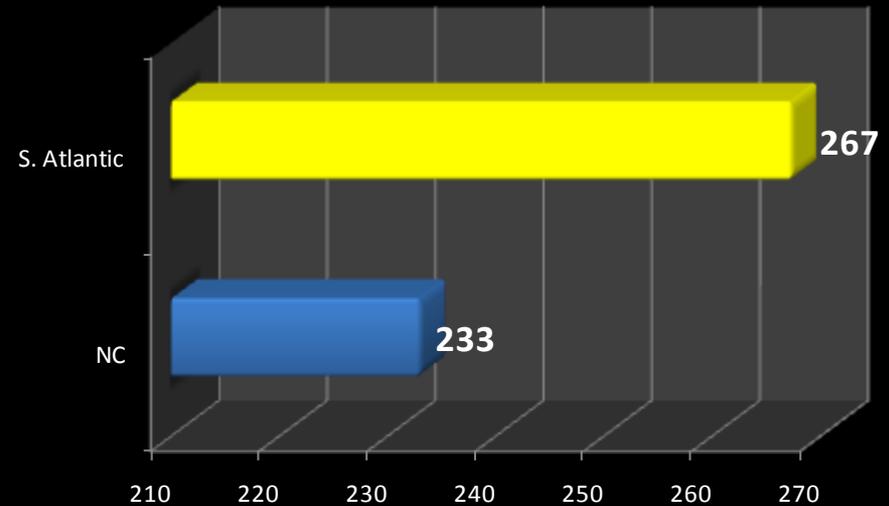
Admissions and Days Per 1,000 NC PPO Compared to S. Atlantic Division

Admissions per 1,000



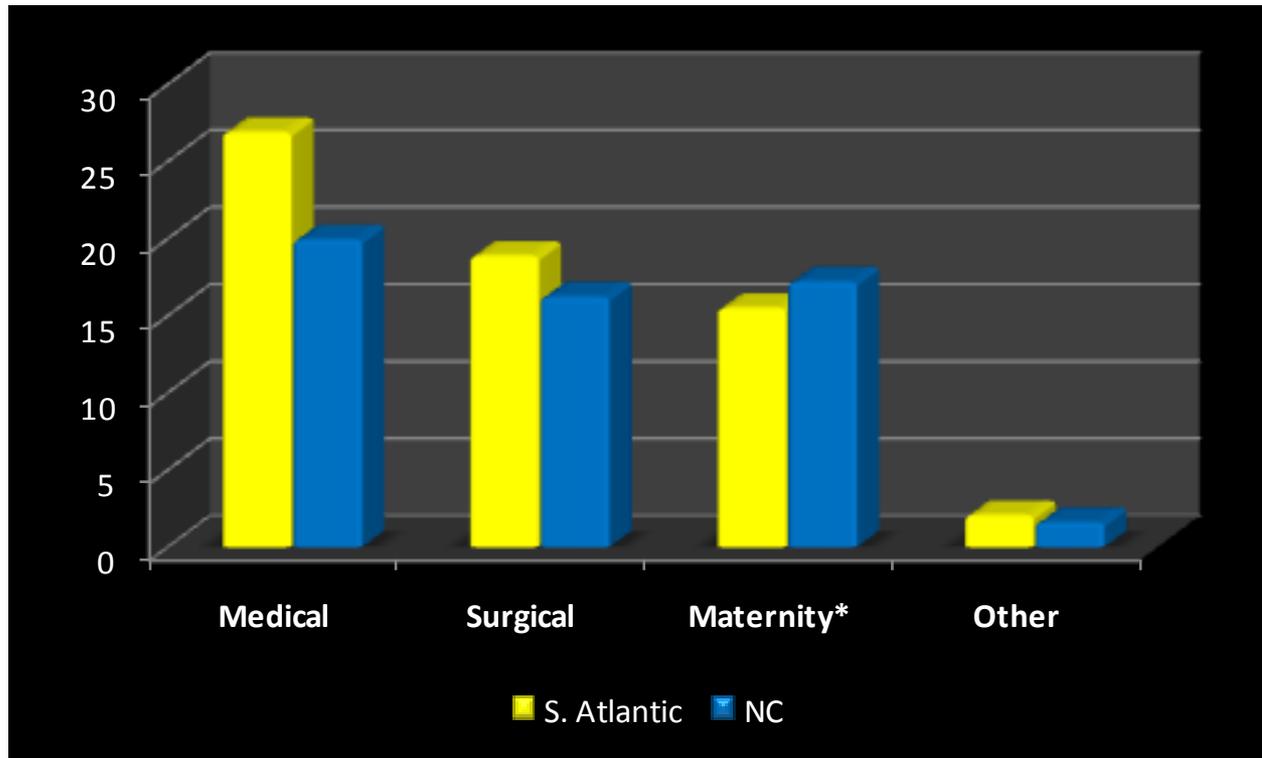
Admissions/1000 13.2% lower

Days per 1,000



Days/1000 12.8% lower

Admission Per 1,000 by Type NC PPO Compared to S. Atlantic Division



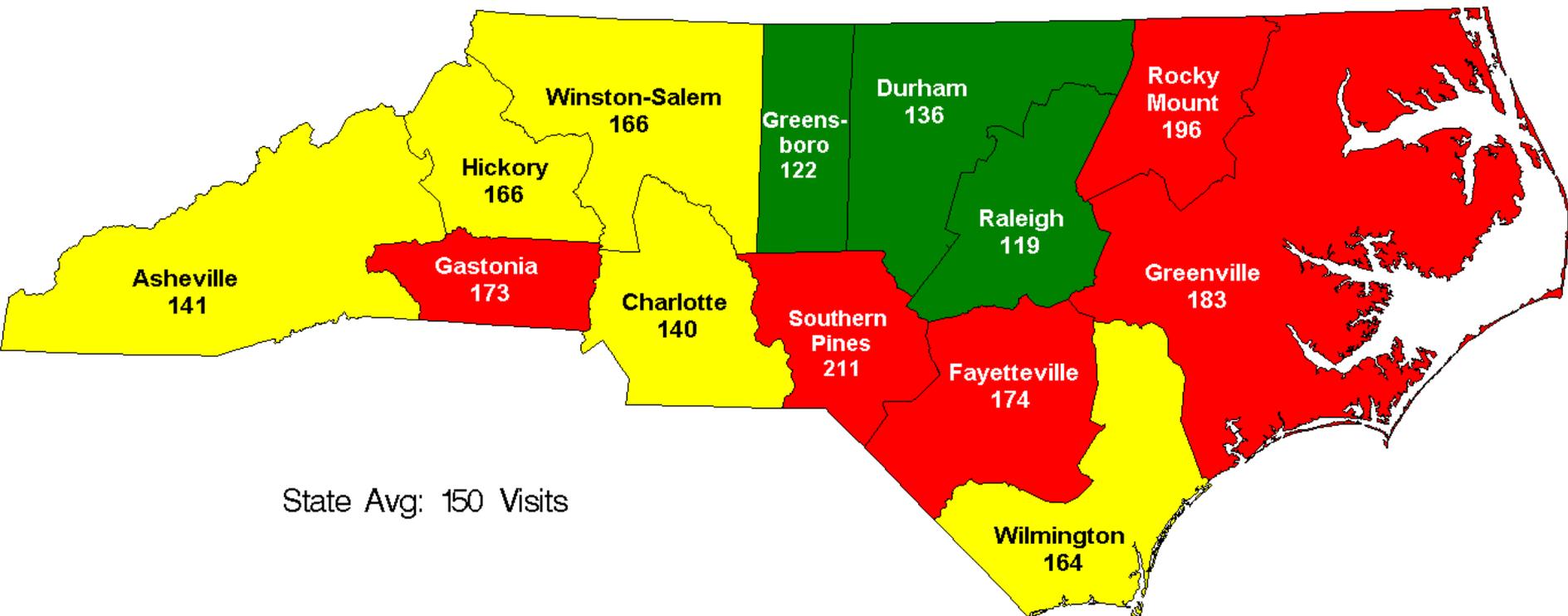
**Medical utilization
26% below norm.**

**Surgical is 14%
lower.**

**Maternity 11%
higher**

***Maternity includes newborn and neonates**

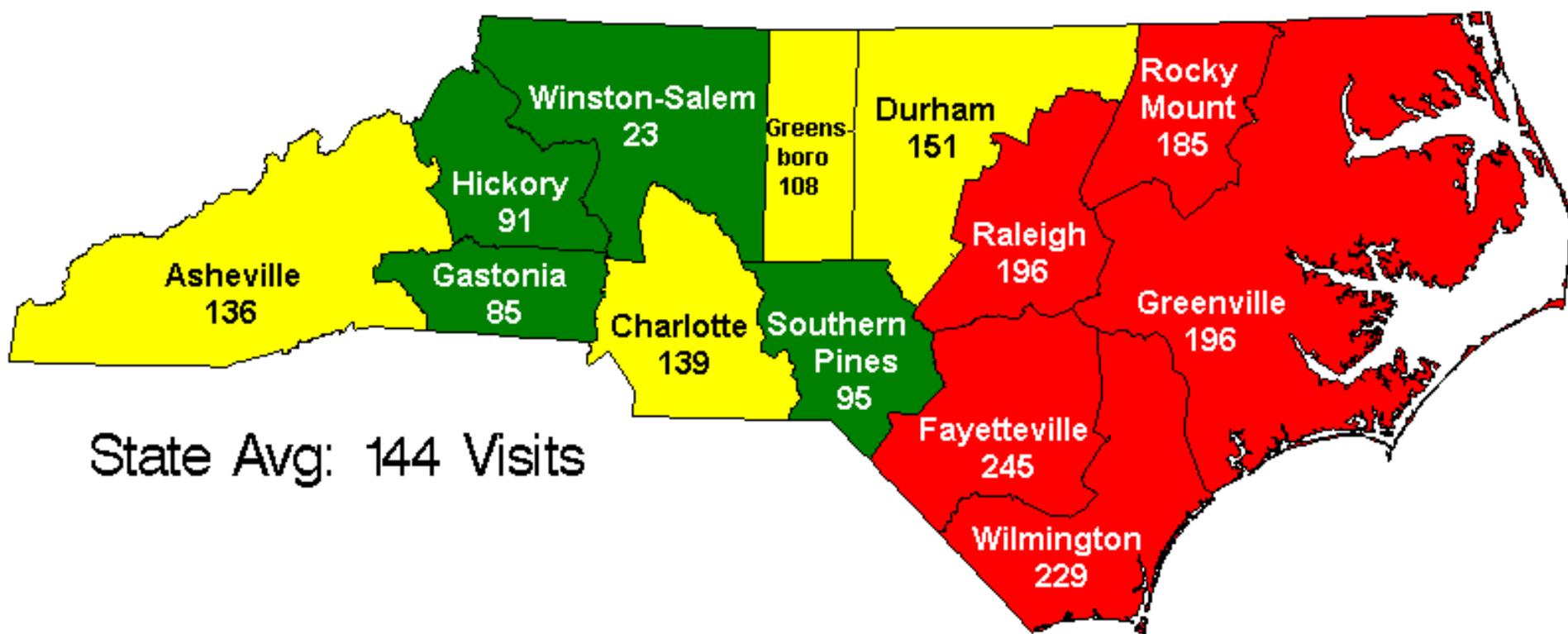
Emergency Room Visits Per 1,000
Group ASO & Underwritten, Blue Advantage
January–December 2009



State Avg: 150 Visits

■ <140 ■ 140-167 ■ >167

Urgent Care Visits Per 1,000
Group ASO & Underwritten, Blue Advantage
January – December 2009



State Avg: 144 Visits

Green <108

Yellow 108-184

Red >184

Business models for care delivery of care

- Solution shop
- Value-add process business
- Facilitated network business

Christiansen, The Innovator's Prescription,
2009

Innovations

- Sustaining (incremental or radical) innovations make good products better
 - Contrast what companies can provide vs. what consumers can utilize
- Disruptive innovations make products simpler and more affordable

Christiansen, The Innovator's Prescription, 2009

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