

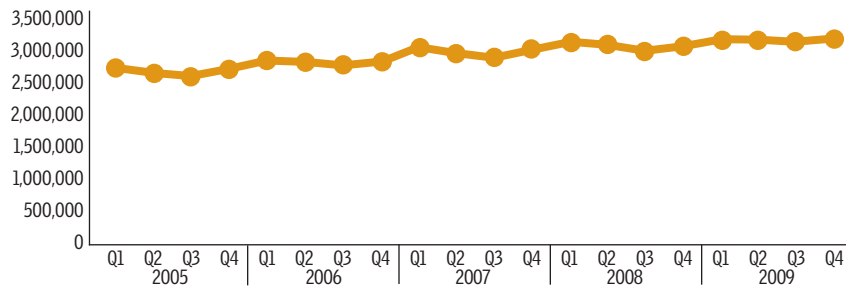
# FACTFILE

## Cardiovascular Service

Cardiovascular service continues to be a major concern for healthcare providers, as it is responsible for millions of admissions and procedures. There are some variations among the trends, though, when considering admission diagnosis, urgent and non-urgent admissions, and stent use.

### UPWARD TREND IN ADMISSIONS

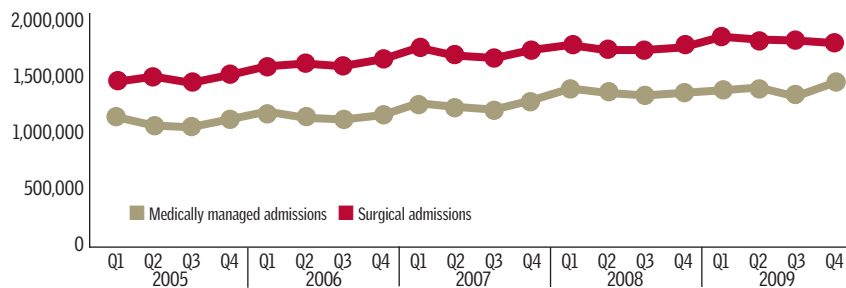
Despite dropping admissions for acute myocardial infarction and heart failure, total admissions with a cardiovascular diagnosis rose 5.9% from 2005 to 2009 due to an increasing number of patients with cardiovascular diagnosis as a secondary condition. This is contributing to the overall increase in severity of admissions.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

### MEDICALLY MANAGED CARDIOVASCULAR ADMISSIONS

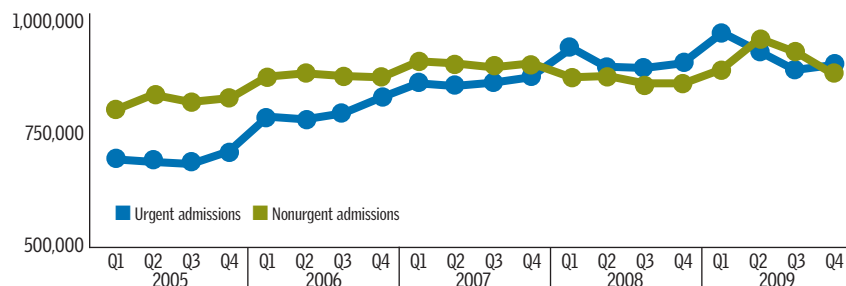
The compound annual growth rate for medically managed admissions was 7.0% between 2005 and 2009. Surgical admissions grew 5.1% despite continued decreases in the coronary artery bypass graft market. Surgical and medically managed cardiovascular admissions maintained their relative market share.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

### URGENT VERSUS NONURGENT ADMISSIONS

While the proportion of inpatient cardiovascular admissions coming through the emergency department has been climbing since 2005, there appears to be a minor downturn in late 2009.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

### Heart Disease Deaths

The heart disease death rate varies considerably by state, with a national average of about 191 per 100,000. These 2007 figures show that Minnesota has the lowest rate at just under 130 per 100,000, while Mississippi has twice that rate, with nearly 267 per 100,000.

Rank (1=low   51=high)	Heart Disease Death Rate per 100,000
<b>United States</b>	<b>190.91</b>
1. Minnesota	129.8
2. Hawaii	140.2
3. Colorado	145.3
4. Alaska	147.9
5. Utah	152.1
6. Arizona	152.5
7. Oregon	156.9
8. South Dakota	159.1
9. New Mexico	159.2
10. Vermont	161.2
11. Florida	162.4
12. Montana	163.1
13. North Dakota	164.1
13. Idaho	164.1
15. Nebraska	165.3
16. Massachusetts	165.5
17. Washington	167.3
18. Connecticut	171.0
19. Wisconsin	171.9
20. Maine	172.9
21. Iowa	174.8
22. New Hampshire	174.9
23. California	177.9
24. Wyoming	178.3
25. Kansas	178.7
26. Virginia	182.7
27. North Carolina	191.0
28. Texas	191.9
28. New Jersey	191.9
30. Illinois	192.8
31. South Carolina	192.9
32. Pennsylvania	199.4
33. Nevada	200.0
34. Delaware	200.2
35. Maryland	202.4
36. Indiana	203.0
36. Georgia	203.0
38. Rhode Island	203.6
39. Ohio	204.8
40. Missouri	214.4
41. Tennessee	220.6
42. Kentucky	220.9
43. Michigan	221.5
44. Arkansas	221.8
45. New York	225.1
46. West Virginia	229.4
47. Louisiana	230.0
48. Alabama	235.5
49. District of Columbia	239.4
50. Oklahoma	241.6
51. Mississippi	266.5

SOURCES: Kaiser Family Foundation, The Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics, *National Vital Statistics Report*, Volume 58, Number 19, May 2010, Table 29. [www.statehealthfacts.org/comparemaptable.jsp?typ=3&ind=77&cat=2&sub=23&sortc=1&o=a](http://www.statehealthfacts.org/comparemaptable.jsp?typ=3&ind=77&cat=2&sub=23&sortc=1&o=a) and [www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_19.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf).

**Upcoming Topic:**  
 > Healthcare Spending

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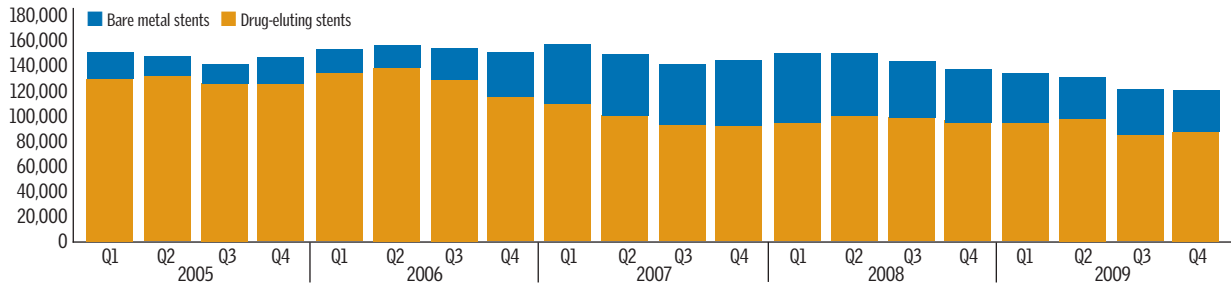


# FACTFILE



## DRUG-ELUTING VERSUS BARE METAL STENTS

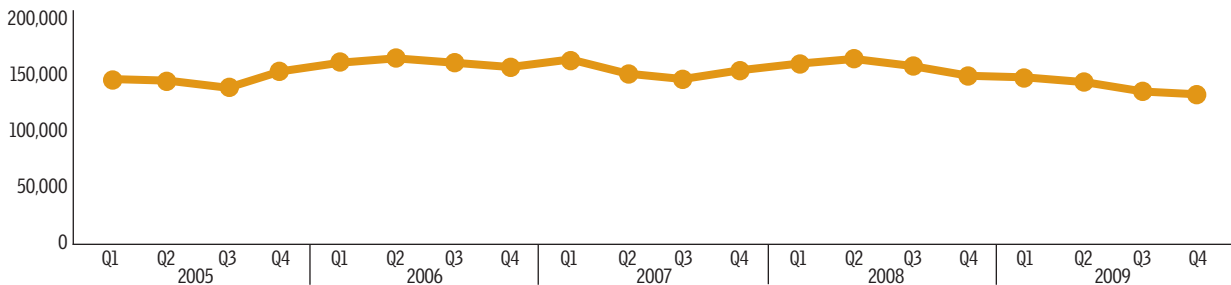
Coronary stent use has declined 17.9% since Q2 2008, with drug-eluting stents capturing 74.6% of a shrinking market in Q4 2009.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

## PERCUTANEOUS INTERVENTION: TOTAL INPATIENT VOLUME

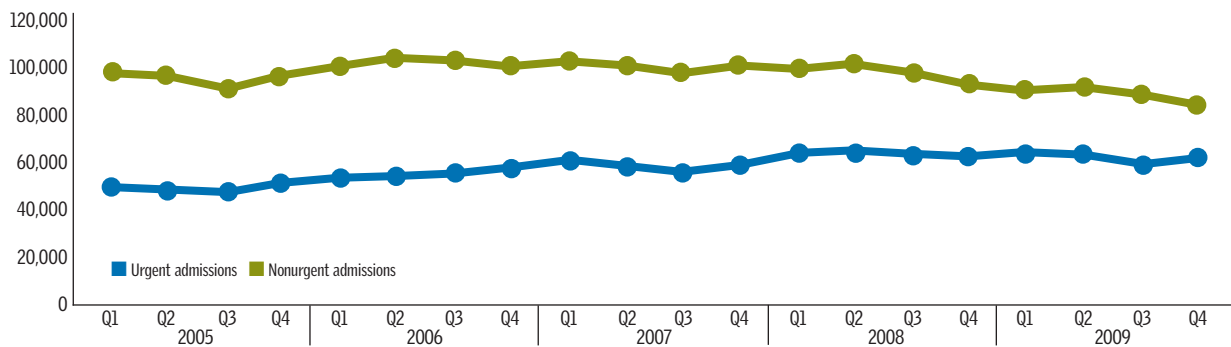
The volume of inpatient percutaneous interventions shows a sharp decline since Q2 2008. This is related to the overall decrease in the stent market.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

## PERCUTANEOUS INTERVENTION: ADMISSIONS MIX

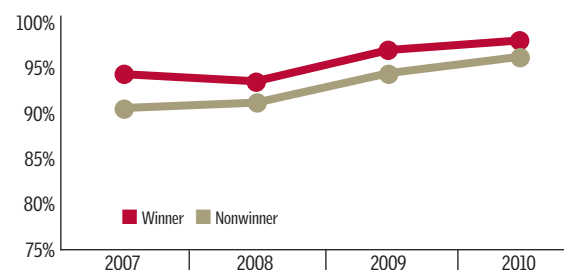
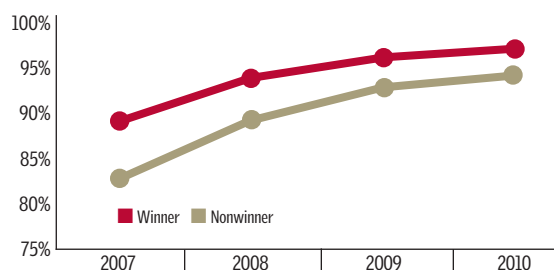
While the overall PCI market is flat, the mix of urgent and nonurgent admissions continues to change, as urgent admissions increased by 5.5% between 2005 and 2009 and nonurgent PCI admissions declined by 5.1% during the same period. Consider, for example, that in Q4 2005, urgent admissions represented 36% of PCI admissions, but by Q4 2009, they had grown to 42% of admissions.



SOURCE: Thomson Reuters MarketScan® Hospital Drug Database.

## CORE MEASURE PERFORMANCE: HEART FAILURE AND HEART ATTACK

Between 2007 and 2010, winners of the Thomson Reuters 50 Top Cardiovascular Hospitals award improved their heart failure core measure performance by 8.3 percentage points, to 97%, meaning the measures were followed for an average of 97% of the patients eligible for them (below left). Nonwinning hospitals showed a greater increase in improvement during that time—moving up by 11.6 percentage points to an average compliance of 94.4% of eligible patients. A similar trend is present for heart attack core measures (below right), with winners having higher compliance than nonwinners, but both groups showing an increase between 2007 and 2010. Compared with the heart failure core measure trend, improvement in heart attack core measure scores is not as great—3.7 percentage points, to an average compliance of 97.8% of eligible patients for winning hospitals in the study performed in 2010, and 6 percentage points, to an average compliance of 96.3% for nonwinners. This lower rate of improvement is partially due to the fact that initial performance on heart attack measures was better than that for heart failure measures.



SOURCE: Thomson Reuters.

