



A Different Perspective: The AARP Sponsored Schondelmeyer-Purvis Studies

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BRAND LOYALTY, GENERIC ENTRY AND PRICE COMPETITION IN PHARMACEUTICALS IN THE QUARTER CENTURY AFTER THE 1984 WAXMAN-HATCH LEGISLATION

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Background

- AARP has issued series of studies focusing on 2006-9 brand price growth of 25 leading branded products dispensed to Medicare Part D beneficiaries in 2006
- These reports have garnered much publicity – brand drug price growth “out of control”
- But is the AARP methodology appropriate -- does it meet professional standards?

Quotes from AARP headlines/reports

- “AARP’s Public Policy Institute finds that average manufacturer price increases for brand name and specialty drugs widely used by Medicare beneficiaries continued to far outstrip the price increases for other consumer goods and services in the 12 months ending with March 2010.” AARP Institute on the Issues 43, May 2010, p. 1.
- “On average, retail prices for 207 brand name drugs that have been on the market since the beginning of the study (December 2004) increased 41.5% by December 2009, compared to the general inflation rate of 13.3 percent during the same period.” Schondelmeyer – Purvis, Rx Price Watch Report, August 2010, p. iv.
- “The average annual cost for one brand name medication was about \$1,400 in 2009. For a consumer who takes three brand prescriptions on a chronic basis, the average annual cost of therapy for the drug products used to treat chronic conditions rose by almost \$1,900 between 2004 and 2009.” Schondelmeyer – Purvis, Rx Price Watch Report, August 2010, p. v.

Media headlines & sources on AARP Rx Price Watch report

US retail drug prices jumped 8% in 2009, despite lower inflation, says AARP study

"Retail prices for some of the most widely used brand-name prescription drugs in the USA shot up more than 8% in 2009, even as inflation plummeted to a record low, according to a new analysis of retail drug price trends released yesterday by the seniors lobby group AARP."

--August 26, 2010, The Pharmaletter

Brand-name drug prices rise faster than inflation

Prescription drugs account for one-tenth of every dollar spent on healthcare. But some of those drugs are seeing much faster growth in price than others.

The average retail price increases for brand name prescription drugs widely used by older people far outpaced growth in the costs of other consumer goods and services for the year ending with March 2010.

--August 25, 2010, FierceHealthcare

AARP Says Brand-Name Drug Prices Up 8% in 2009

"A new report on retail prices of brand-name drugs shows the 217 products most used by older Americans increased by an average of 8.3 percent during 2009, the largest increase in years, even as inflation was negative."

--August 24, 2010, New York Times



Key AARP methodologies

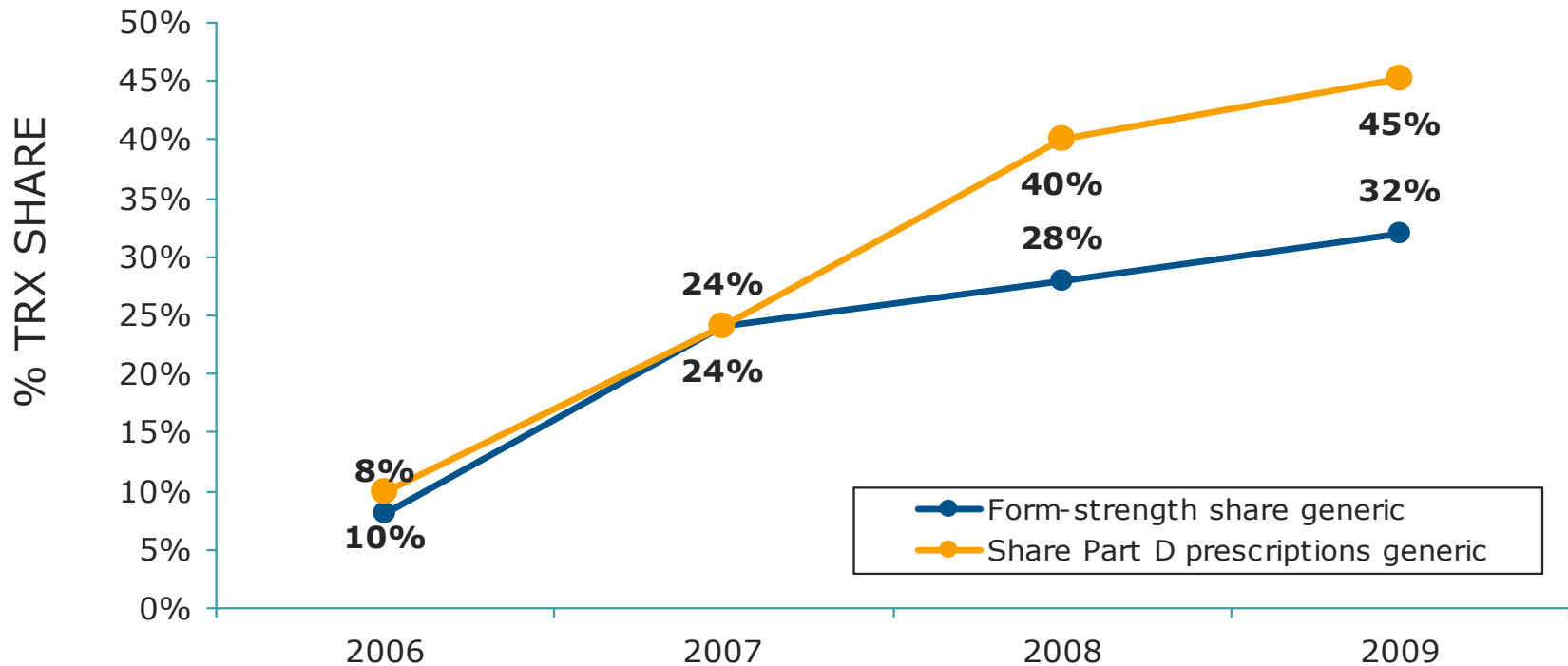
- Sample of leading branded drug form-strengths is drawn from 2006 Medicare Part D data, kept unchanged through 2009
- Weight assigned each drug is *fixed* based on same 2006 data, ignores compositional changes in drug utilization among sample of leading branded drugs
- Completely ignores the fact that by 2009, eight of leading 25 drug form-strengths had experienced *generic* entry
- Only tracks brand price growth 2006-9, doesn't look at *average price* of molecule over brand and generic form-strengths
- Does not meet standards adopted by BLS and BEA

What has actually happened?

- By 2009:
 - 32% of AARP leading 25 brand sample had lost market exclusivity
 - 45% of all prescriptions dispensed to Medicare Part D beneficiaries for these 25 molecule form-strengths were generic
- Number of *total* Rxs dispensed to Medicare Part D beneficiaries *increased 40%* from 72 mn to 101 mn between 2006-9
 - Number of branded Rxs dispensed decreased 15% from 65 mn to 55 mn
 - Number generic Rxs dispensed increased more than six-fold from 7 mn to 46 mn

Generics have become a more significant share of the top 25 Part D drugs since 2006

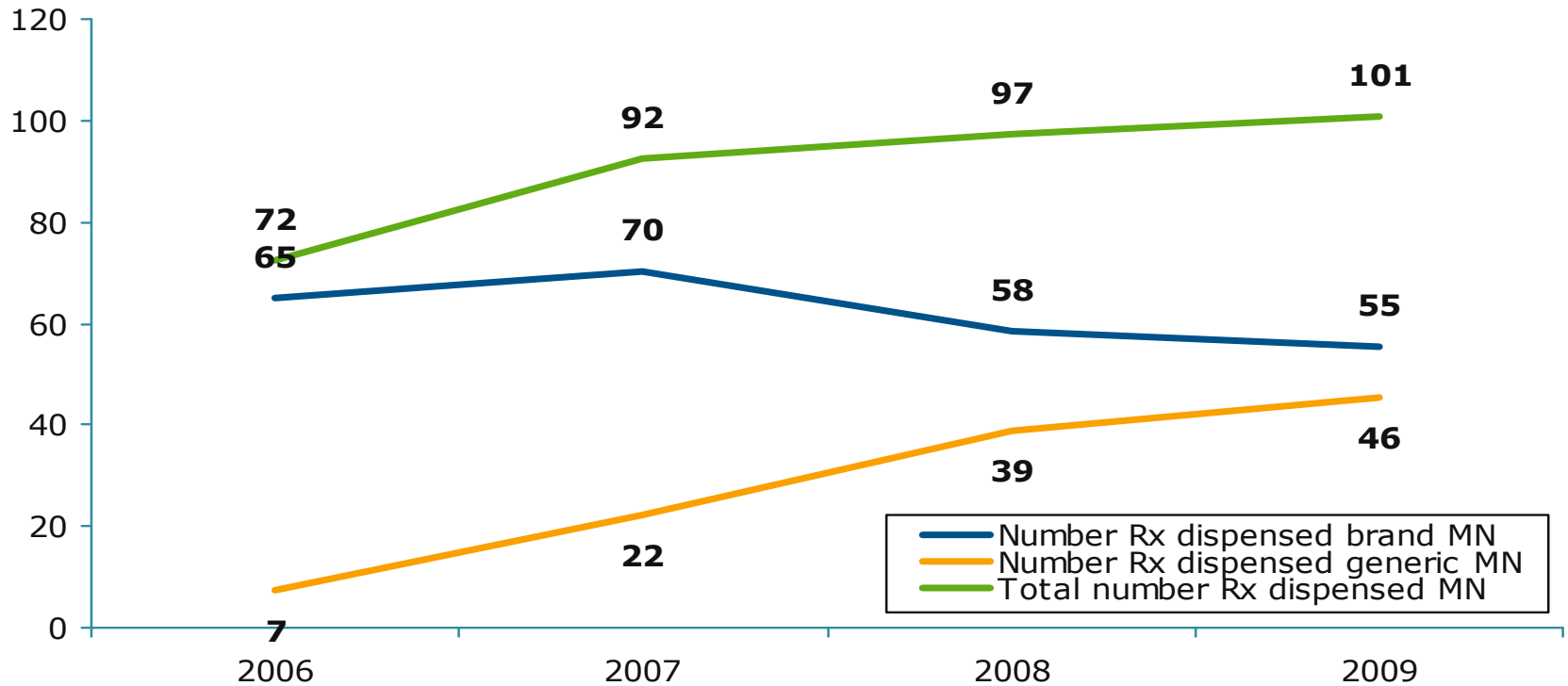
SHARE GENERIC NUMBER AND UTILIZATION OF FORM-STRENGTH DRUGS



Source: IMS Plantrak, Medicare part D dispensed prescriptions for the top 25 product-form-strengths in 2006

The number of prescriptions dispensed has increased as the brand/generic mix has changed significantly

NUMBER OF TOTAL, BRAND AND GENERIC FORM-STRENGTH RX'S DISPENSED

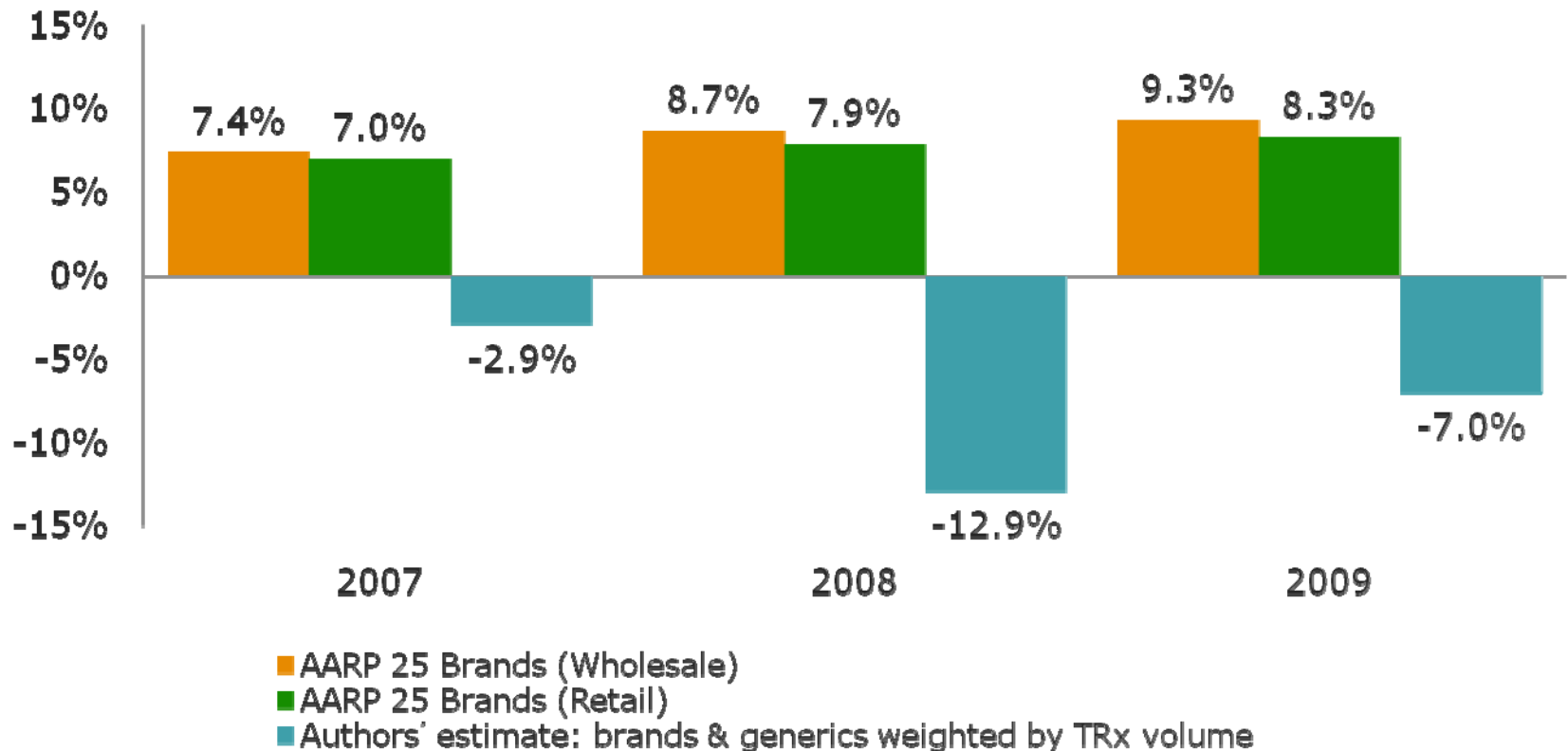


Source: IMS Plantrak, Medicare Part D dispensed prescriptions for the top 25 product-form-strengths in 2006

Preliminary evidence on incorporating generics and updating weights

- We examine same 25 form-strengths as in AARP [2010] study, but incorporate generics where available and use updated (rather than fixed) weights
- Data from IMS Health, WAC prices (as in AARP)
- Our initial estimates are based on a weighted average price per prescription (aka form-strength volume weighted aggregate price using current year shares)

Alternative aggregate 2006–2009 price changes for 25 leading product form-strengths, including generics



Note: Authors' estimate includes generics where available

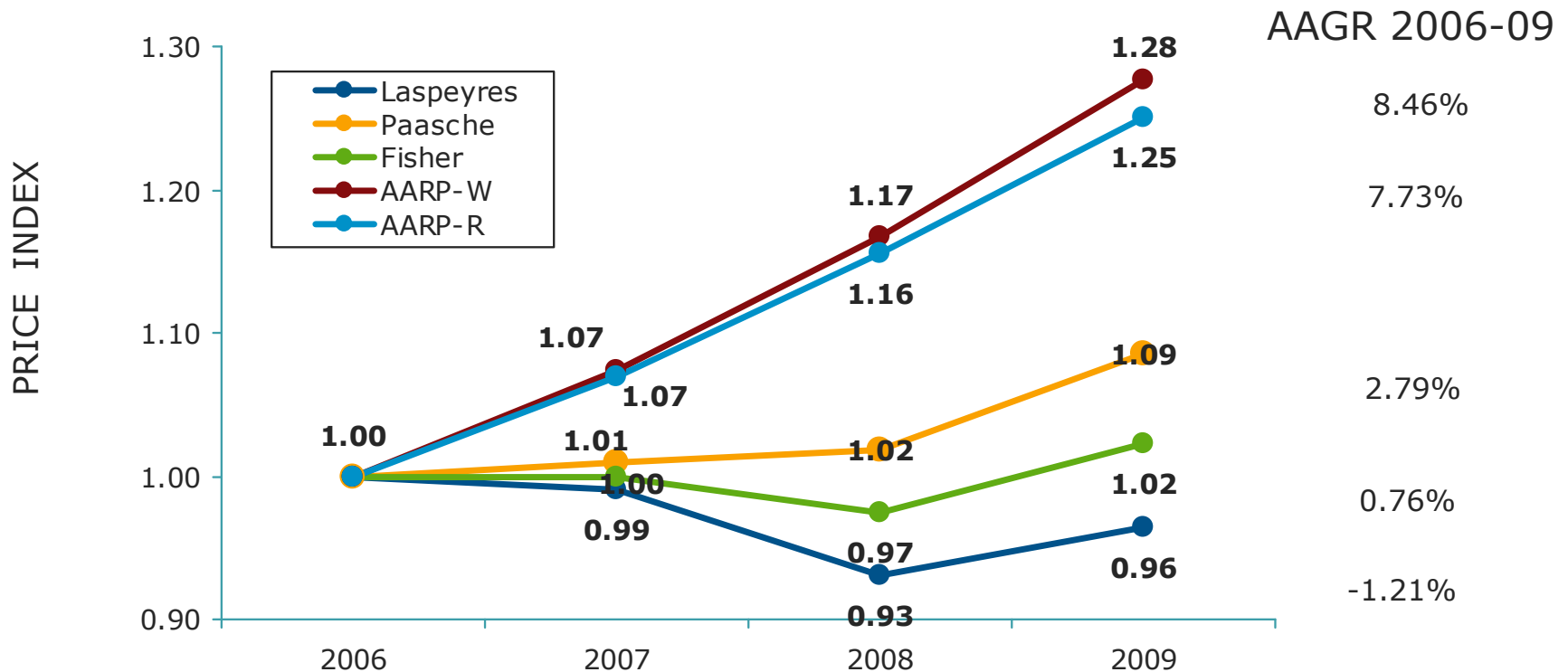
Source: IMS DDD prices at WAC Level and IMS Plantrak Medicare Part D prescriptions, Dec 2009. AARP Rx Watchdog Reports (May 2010 & August 2010);

Alternative aggregate price-index calculations have been assessed using different weightings

- Year-to-year price relatives weighted by base year shares (Laspeyres)
- Current year shares (Paasche)
- Geometric mean of the shares (Fisher Ideal)

Aggregate price indexes will vary considerably depending on which weights one employs

ALTERNATIVE PRICE INDEXES (2006 = 1.00)



Source: Authors' calculations

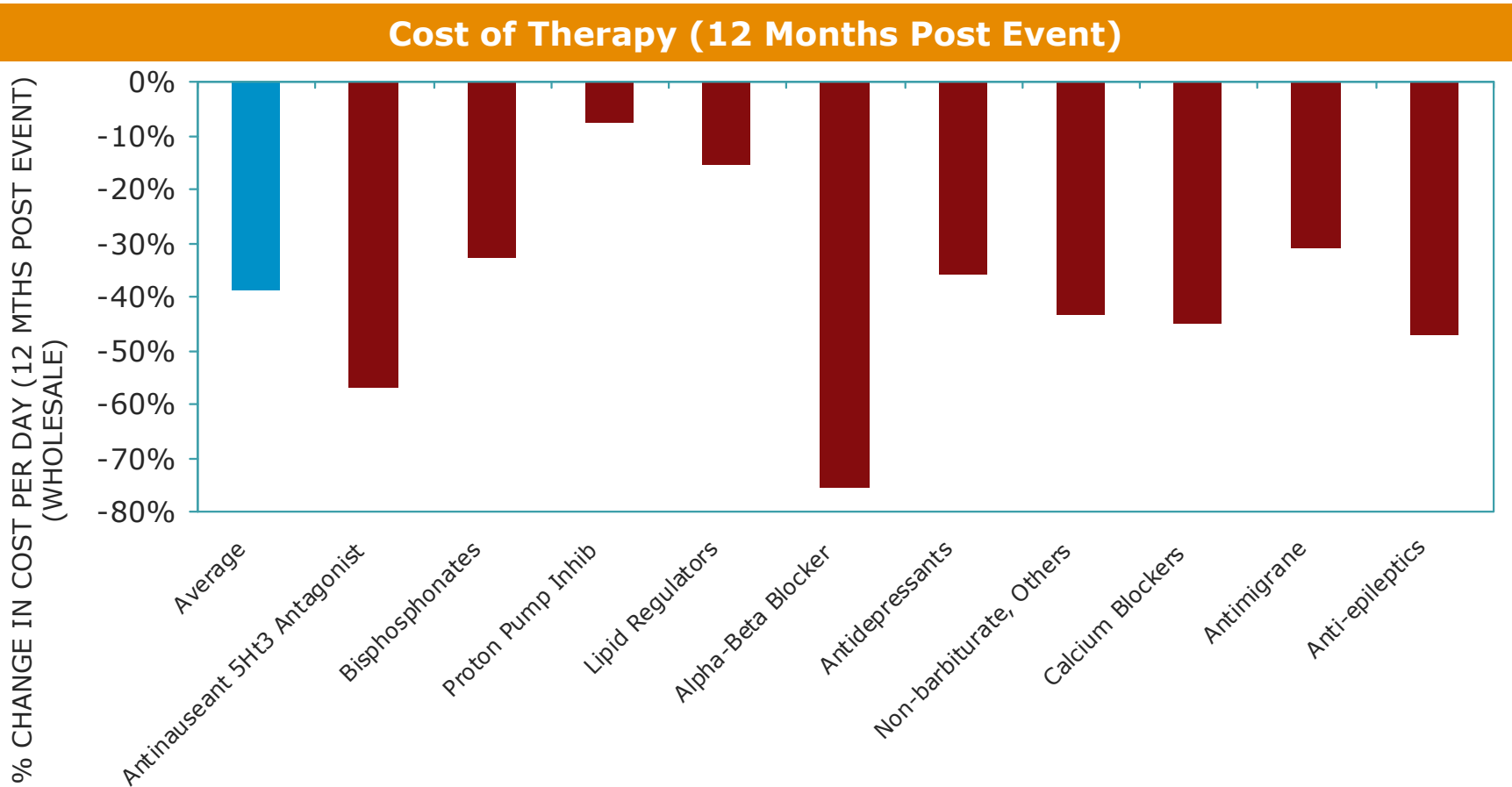
Trends in average daily cost of treatment for major therapeutic areas

- A more general approach focused on 9 major therapeutic areas that in 2005 accounted for 25% of US dollar costs and 18% of prescriptions
- At least one generic entry since 2006
- Average daily cost of drug treatment calculated before and 12 – 24 months after generic entry
- Potential future trends projected through 2014

Substantial declines in average daily cost of treatment have occurred across major therapeutic areas

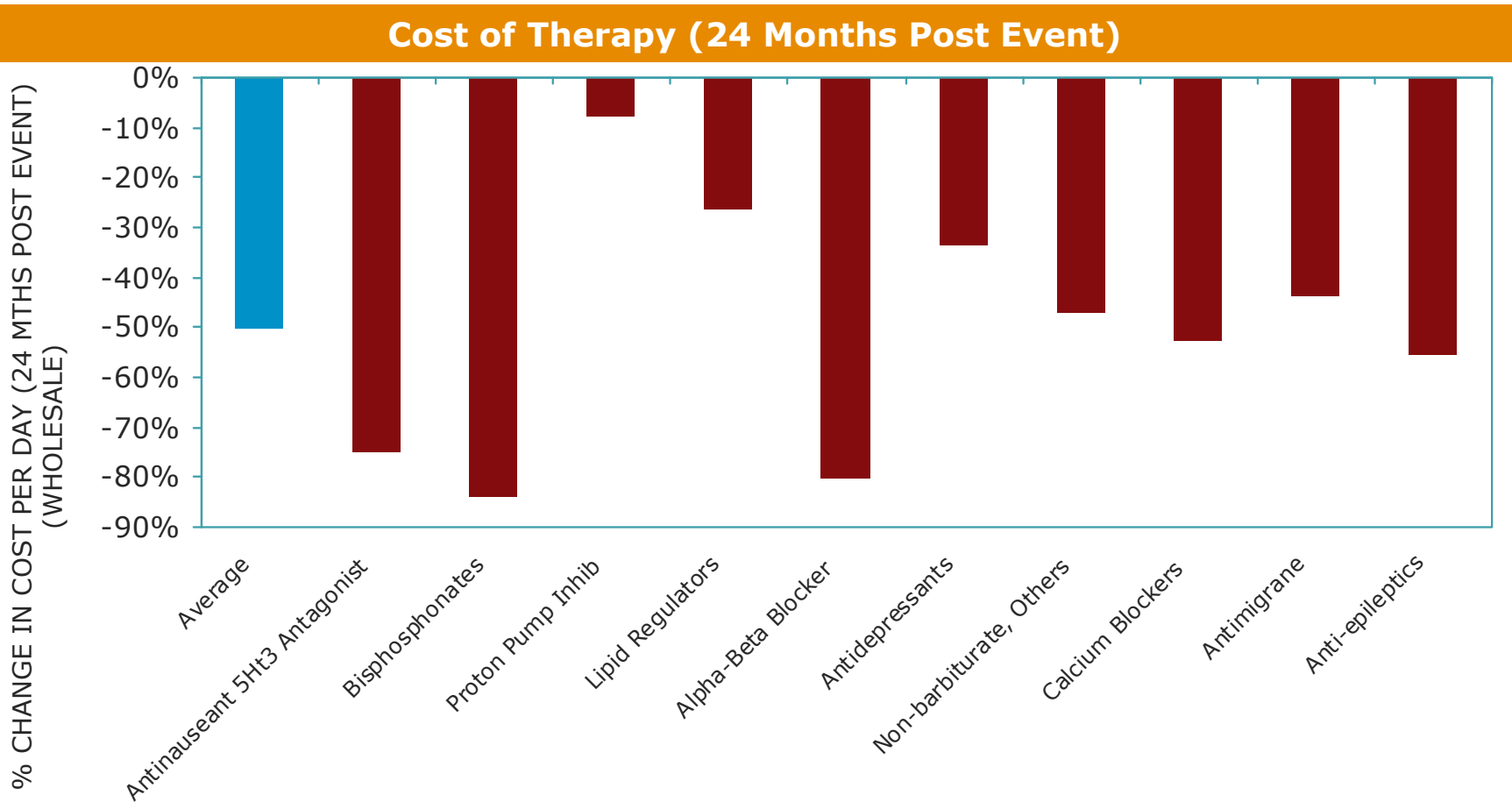
- 12 months post generic entry: Reduction ranges from -5.1% to -75.5%, unweighted mean is -37.1%, weighted (by extended unit shares) is -27.5%
- Small reduction for PPIs due to shift to OTC not incorporated in Rx number calculations
- 24 months post generic entry: Reduction ranges from -7.8% to -84.1%, unweighted mean is -50.1%, weighted is -35.1%

An average 38% reduction in the daily cost of therapy after 12 months has occurred in many major classes with recent expiries



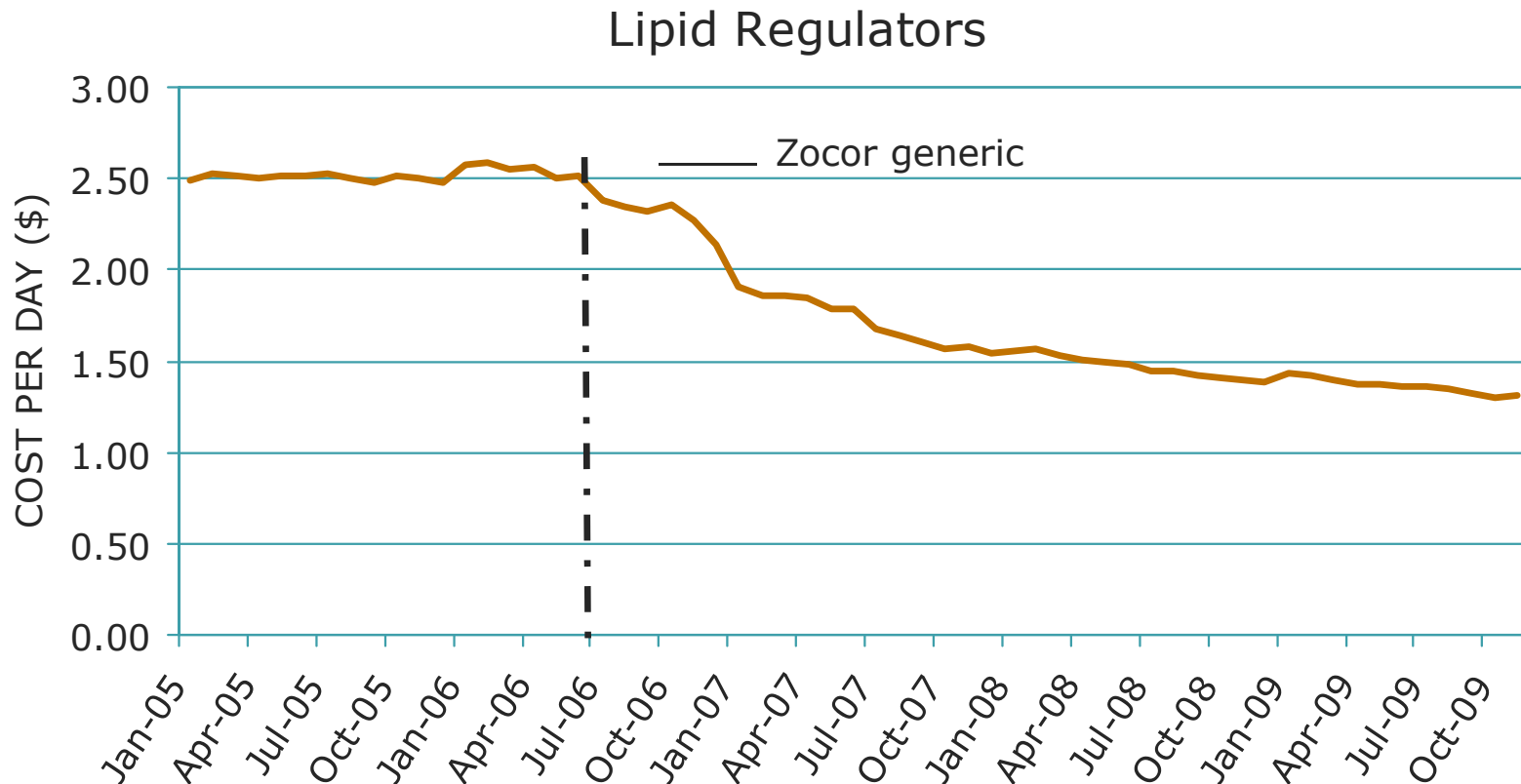
Source: IMS Health, National Sales Perspectives & National Prescription Audit, Dec 2009

An average 51% reduction in the daily cost of therapy after 24 months has occurred in many major classes with recent expiries



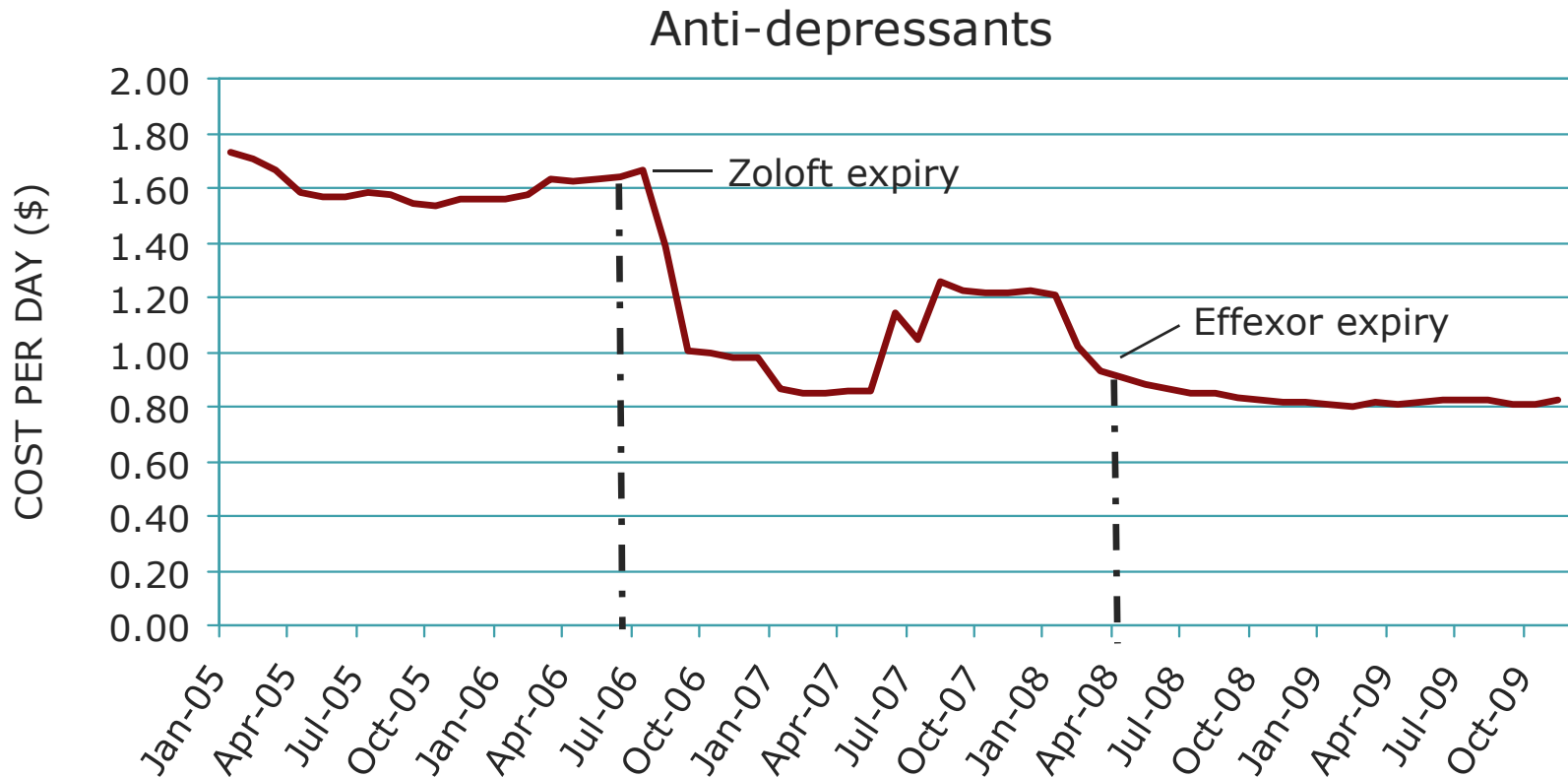
Source: IMS Health, National Sales Perspectives & National Prescription Audit, Dec 2009

Lipid Regulators daily therapy cost has declined from \$2.52 to an average of \$2.13 and \$1.86 post Zocor expiry



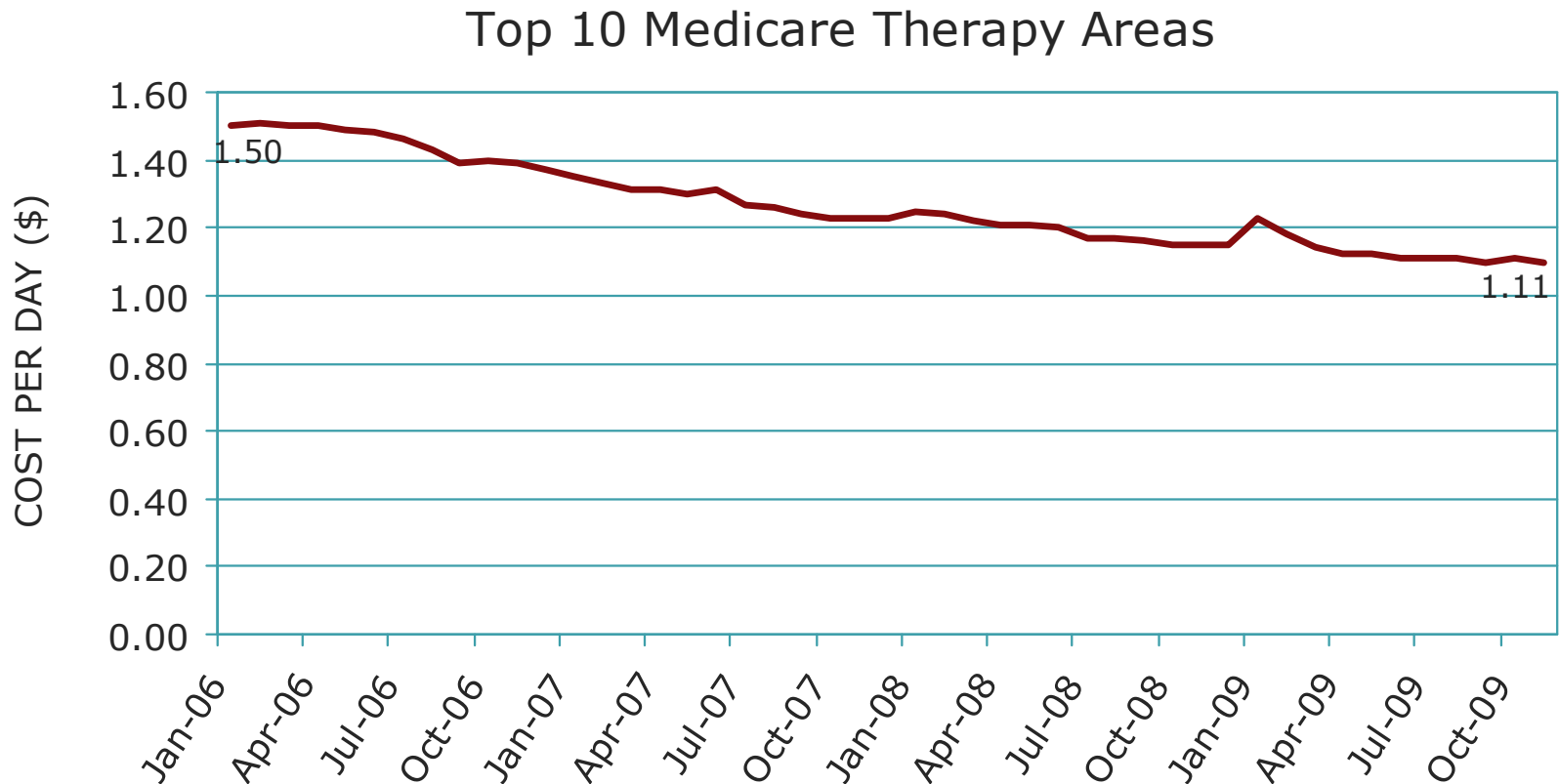
Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

Anti-depressants daily therapy cost has declined from \$1.60 to an average of \$1.03 and \$1.06 post Zoloft expiry



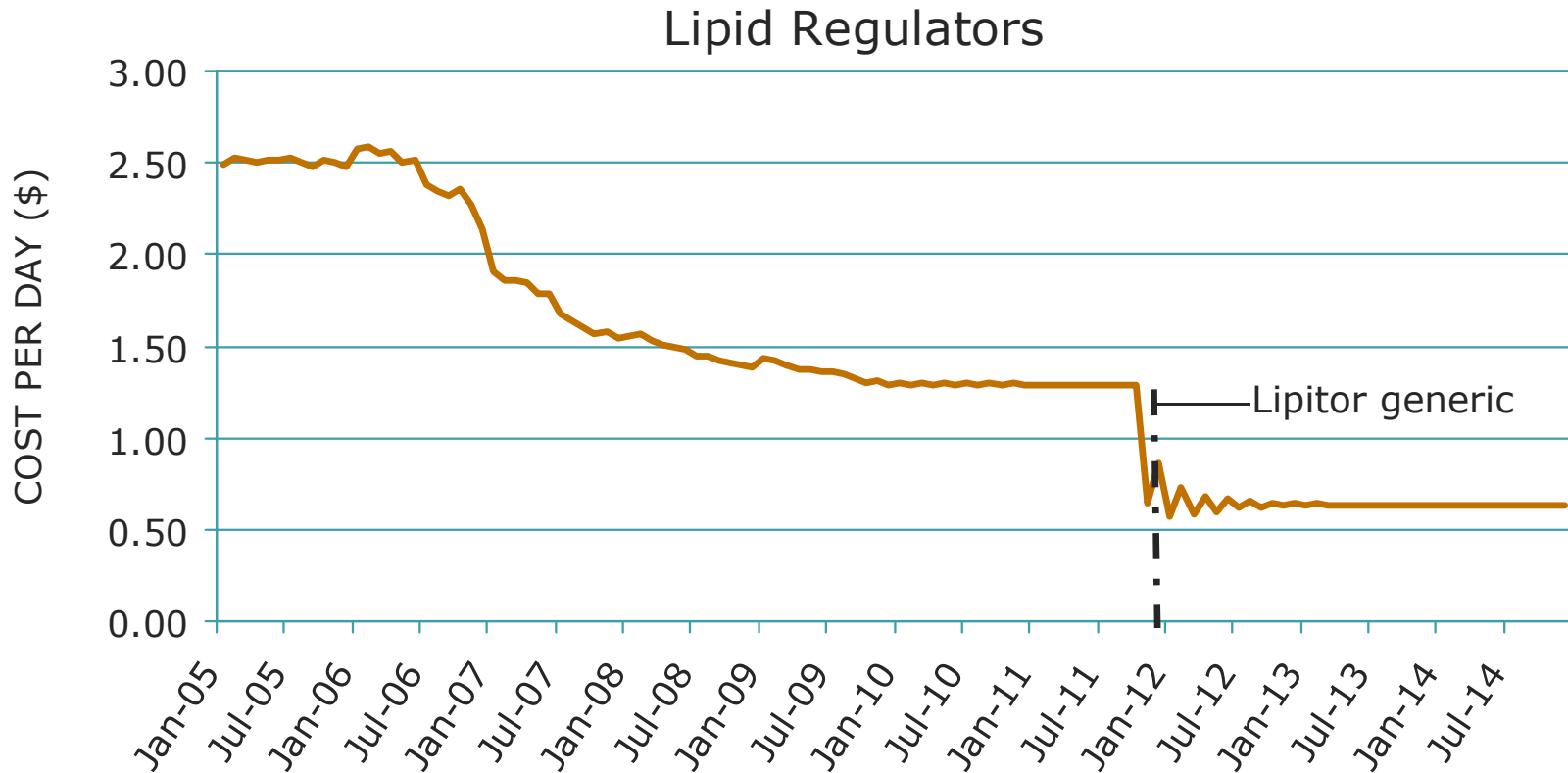
Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

Average daily cost of the top 10 Medicare Part-D areas has declined from \$1.50 to \$1.11 in 2009



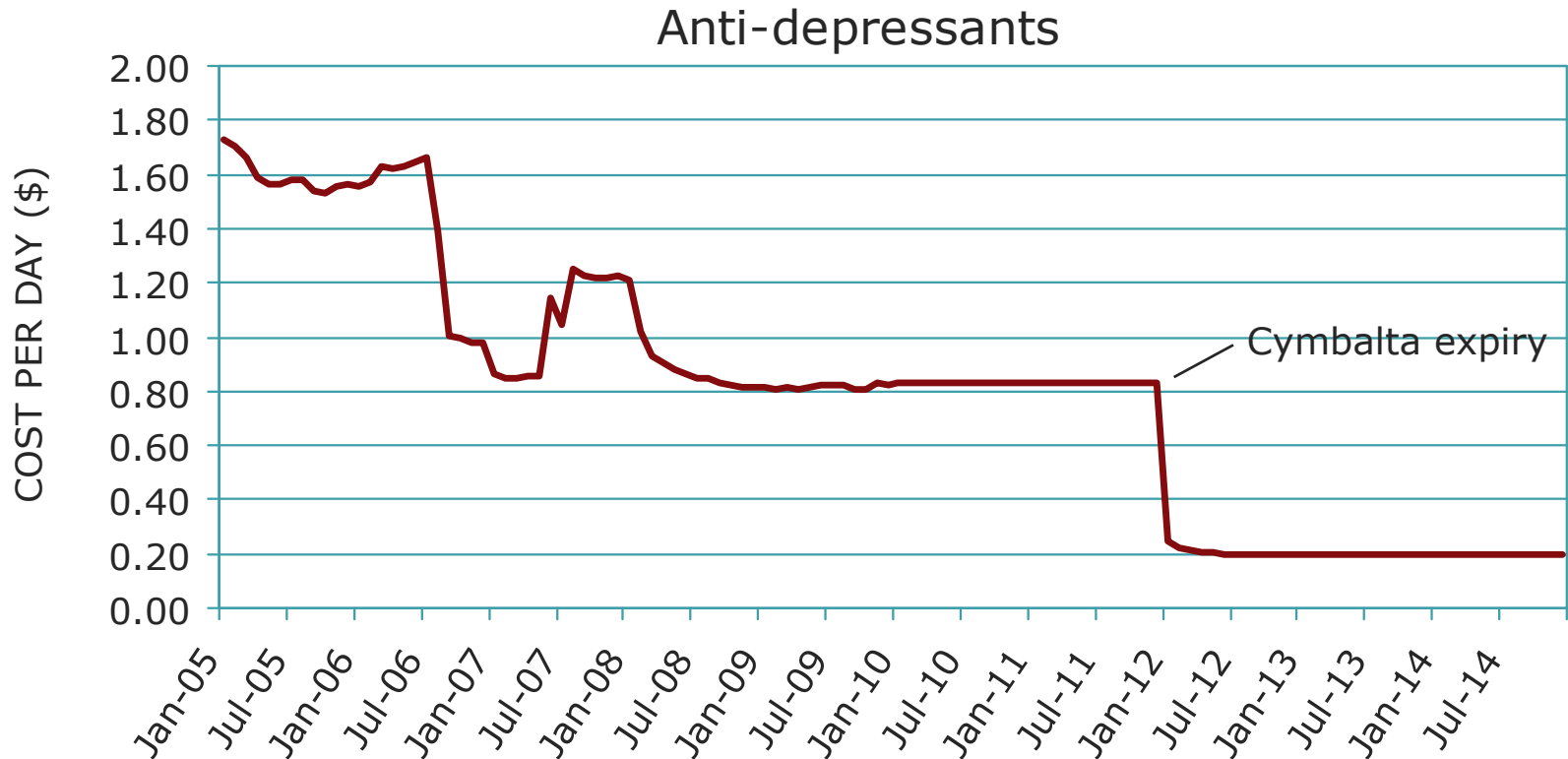
Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

The introduction of generic atorvastatin will likely lower average cost of lipid regulators further



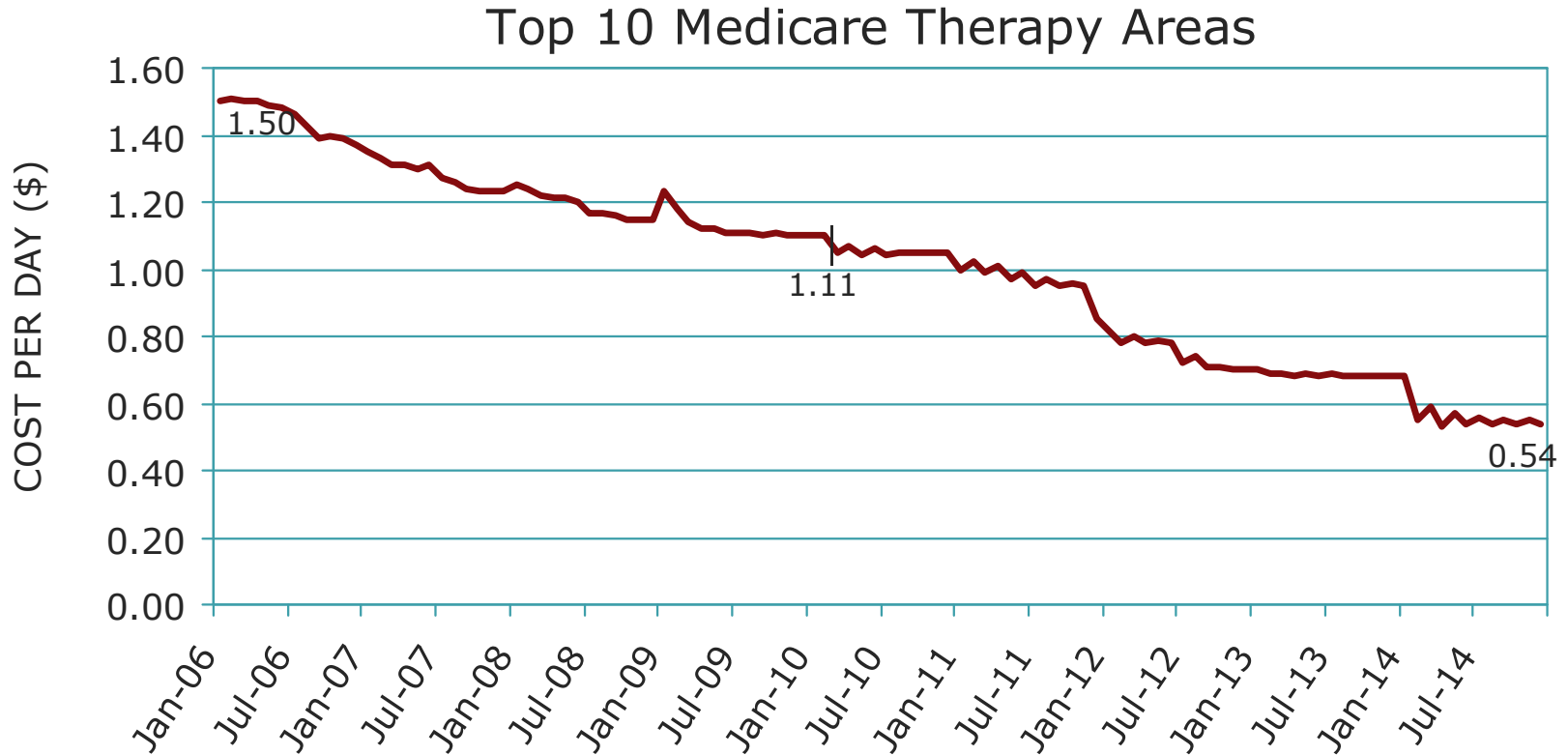
Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

Anti-depressants cost per day will likely fall to \$0.20 with Cymbalta's patent expiry



Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

The top 10 Medicare Part-D therapy areas may see average treatment cost fall to \$0.54 in 2014



Source: IMS Health, National Sales Perspectives, National Prescription Audit, Dec 2009

Average daily cost of treatment conclusions

- The reductions in average daily cost of treatment across entire therapeutic class following loss of patent protection have been substantial, and in a number of cases, very large
- We can expect comparable savings will be realized in the coming next few years as, according to IMS Health, various brands are expected to lose patent protection – e.g., Flomax™, Aricept™, Lipitor™ and Plavix™.
- These market developments ignored by AARP



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