

## BACKGROUND

- In 2013, generic drugs represented 86 percent of all prescriptions filled in the U.S. and yet consumed only 29 percent of all costs for prescription drugs<sup>1</sup>
- Between 2002 and 2011, generic drug utilization was estimated as saving the U.S. approximately \$1 trillion in healthcare costs
- Despite wide-spread availability of generic drugs and favorable costs, their uptake by consumers remains incomplete

## OBJECTIVES

- We aimed to quantify generic utilization rates (GURs) and generic substitution rates (GSRs) across high-priority therapeutic drug classes between 2010 and 2013
- This was part of a larger project aimed at understanding determinants of generic drug usage in the U.S.

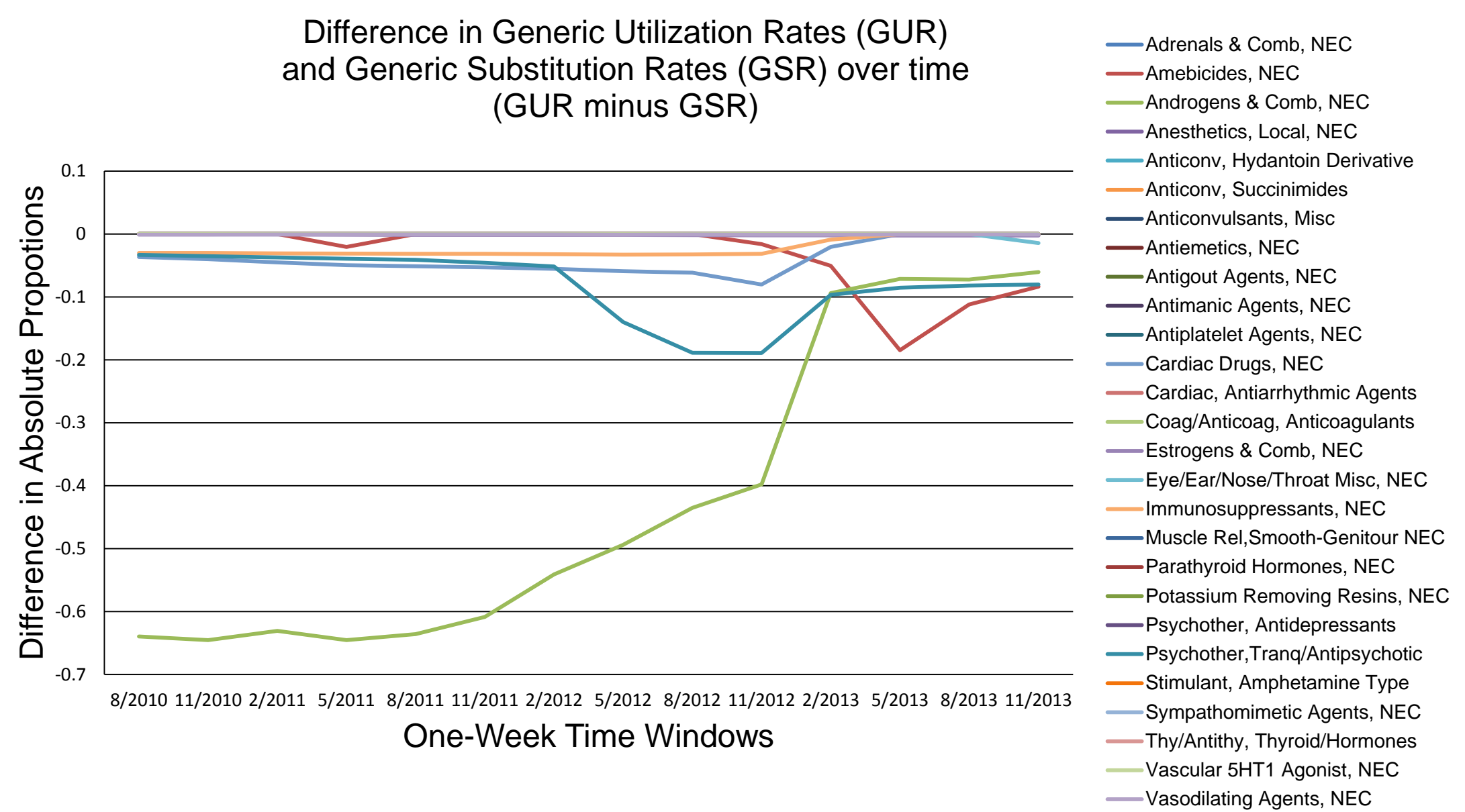
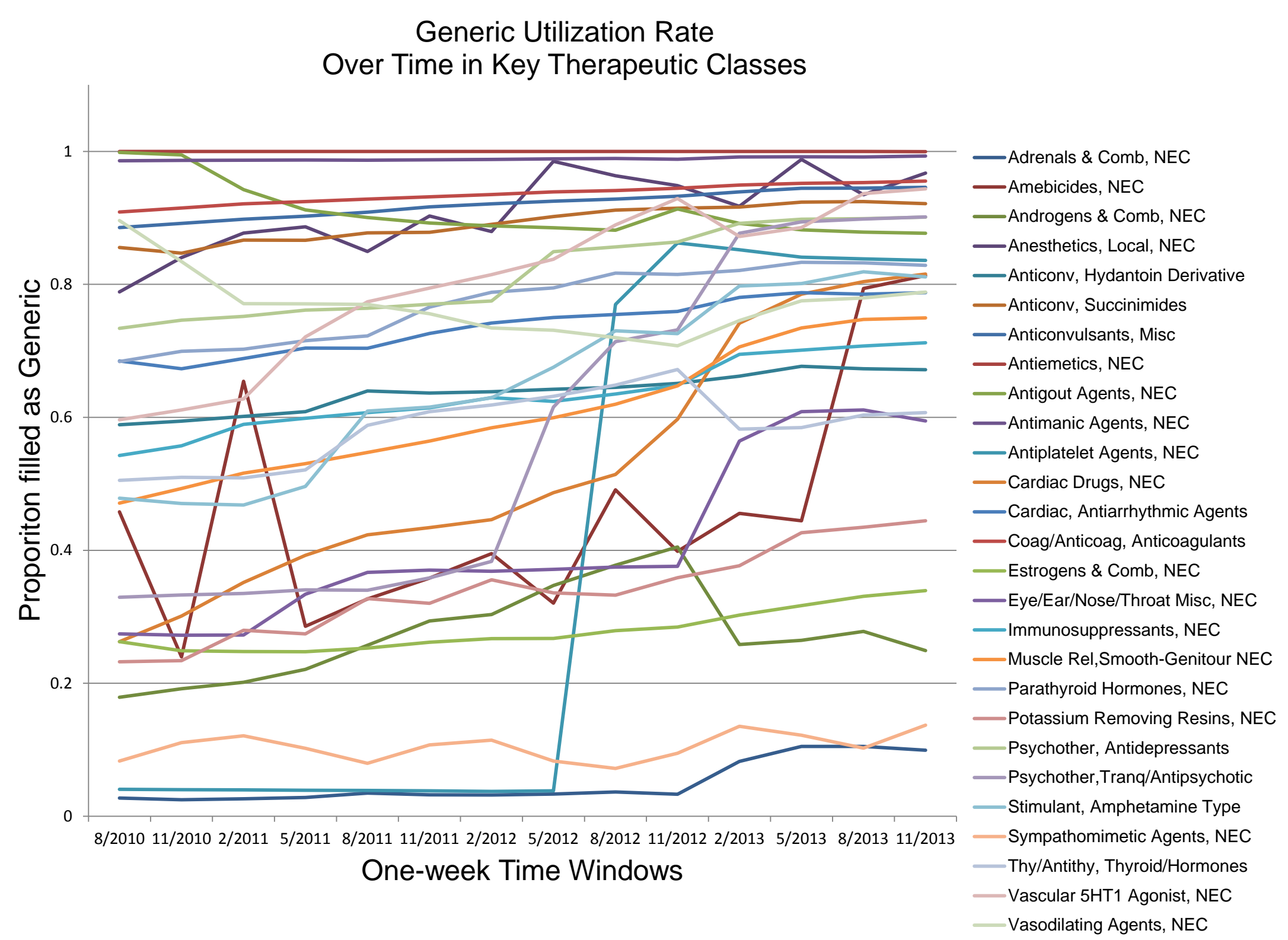
## METHODS

- Data are from the Truven Health Analytics: MarketScan Commercial Claims and Encounters database (2010-2013)
- Therapeutic classes were categorized based on AHFS coding
- Prioritized therapeutic classes for study: a) drugs having narrow therapeutic indices, b) high utilization, c) generic underuse documented in the literature, and d) high rates of coupon<sup>2</sup> use for branded products
- Calculated the GSR and the GUR for prevalent users, operationalized as the proportion of days with generic coverage by a drug in the index class, within fourteen 7-day windows
- Brand/generic status** Drugs classified as in Red Book<sup>TM</sup>
  - Multisource source brands, **with** generic available
  - Multisource brands, **without** generic available
  - Single source brands (generics **not** available)
  - Multisource generics
  - Single source generics

## DEFINITIONS

- The **GSR** is days “covered” by generic drug divided by total days covered by generic or brand drug *when generic is available*.
- The **GUR** is days “covered” by a generic drug divided by total days covered by a generic or brand drug *regardless of generic availability*.

## RESULTS



## CONCLUSIONS

- Class GSR *necessarily* exceeds the class GUR when there are many branded products in the class for which there are no generics available *or* when there are many generics appropriate for *therapeutic substitution across drugs* within a class
- GSR and GUR generally very similar
- Rates in some classes are heavily driven by a single drug (e.g. clopidogrel)

## IMPLICATIONS

- Confirmed that some classes still have relatively low generic utilization
- Investigation at a class level requires specification of GUR or GSR – these are different measures

## NEXT STEPS

- Presently modeling determinants of generic utilization using multilevel logit models
- Results should guide development of interventions to increase generic utilization such as targeted education or incentives

<sup>1</sup> Aiken M. Use and shifting costs of healthcare: A review of the use of medicine in the U.S. in 2013. April 2014.

<sup>2</sup> IMS Health Integrated Promotional Services, 2010-2012