

# Therapeutic Class Differences in Generic Usage

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## 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<sup>1</sup>
- 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.

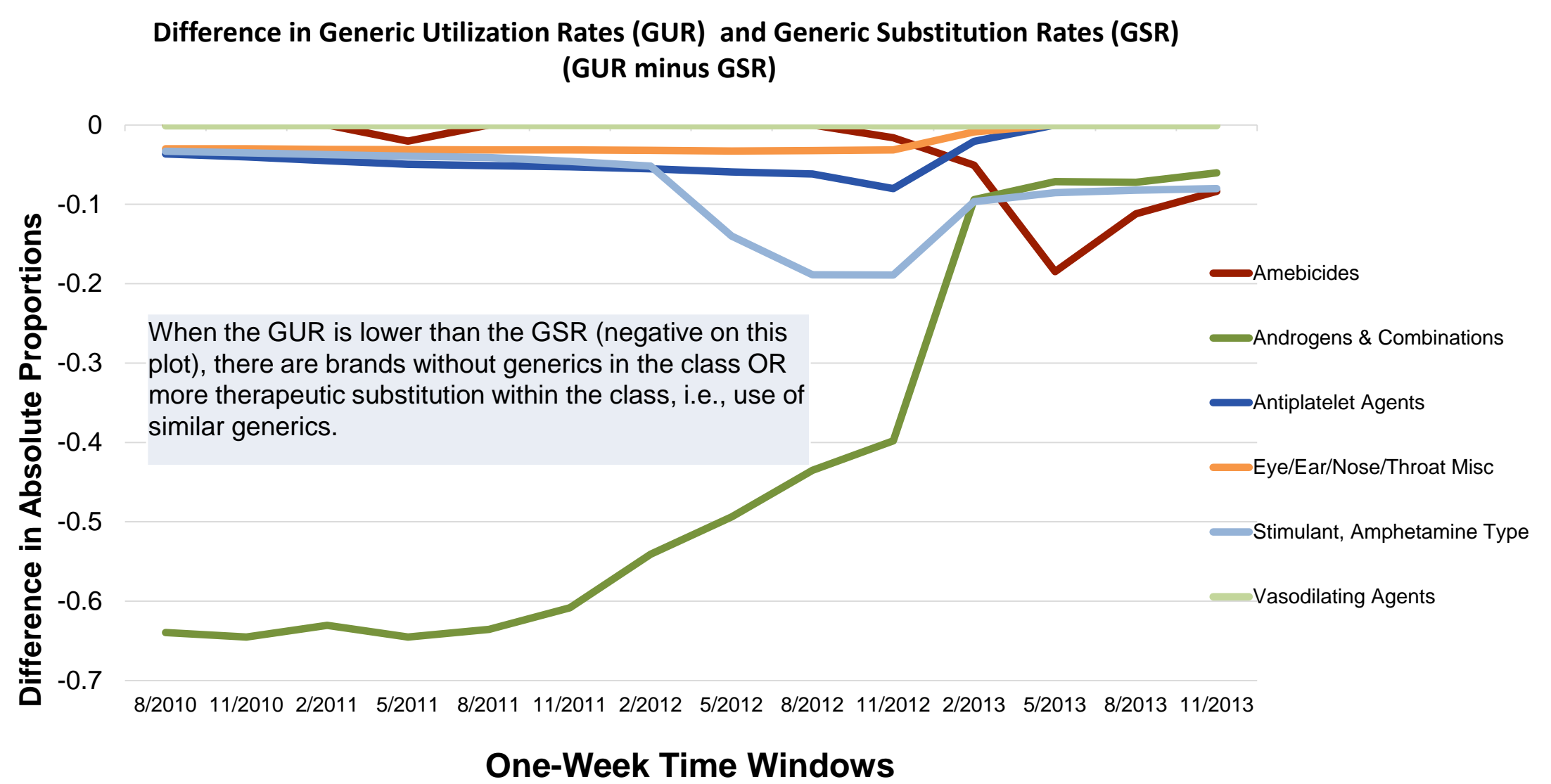
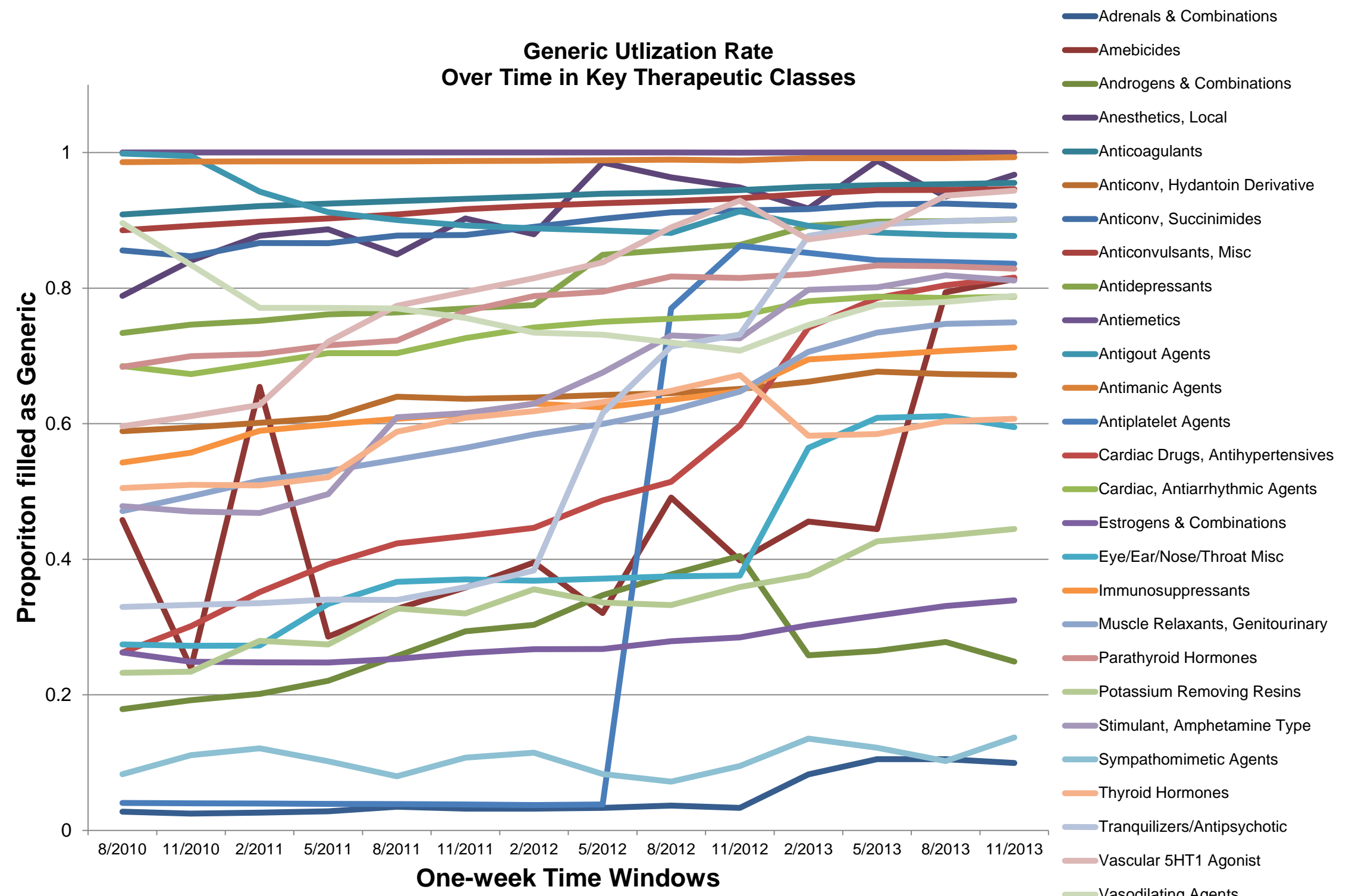
## METHODS

- 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 shown in the literature, and d) high rates of coupon<sup>2</sup> use for branded products
- Calculated GSR and the GUR for prevalent users, operationalized as the proportion of days with generic coverage by a drug in the index class, in fourteen 7-day windows
- Drugs classified as in Red Book<sup>TM</sup>

## DEFINITIONS

- The **GSR** calculated as days “covered” by generic drug divided by total days covered by generic or brand drug *when generic is available*. Reflects opportunities for use of a generic that were taken.<sup>3</sup>
- The **GUR** is days “covered” by a generic drug divided by total days covered by a generic or brand drug *regardless of generic availability*. Reflects *generic usage* of the drug regardless of the availability of alternative products.<sup>3</sup>

## 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 within a class
- GSR and GUR mostly very similar
- Rates in some classes are heavily driven by a single drug (e.g. clopidogrel, testosterone patch)

## IMPLICATIONS

- Confirmed that some classes still have relatively low generic utilization [estrogens, androgens, steroids (inhaled), sympathomimetics]
- 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  
<sup>3</sup> Liberman JN, et al. *Prescription Drug Costs and the Generic Dispensing Ratio*. J Manag Care Pharm, 2010. 16(7): p. 5