

# The Consequences of (Partial) Privatization of Health Insurance for Individuals with Disabilities: Evidence from Medicaid

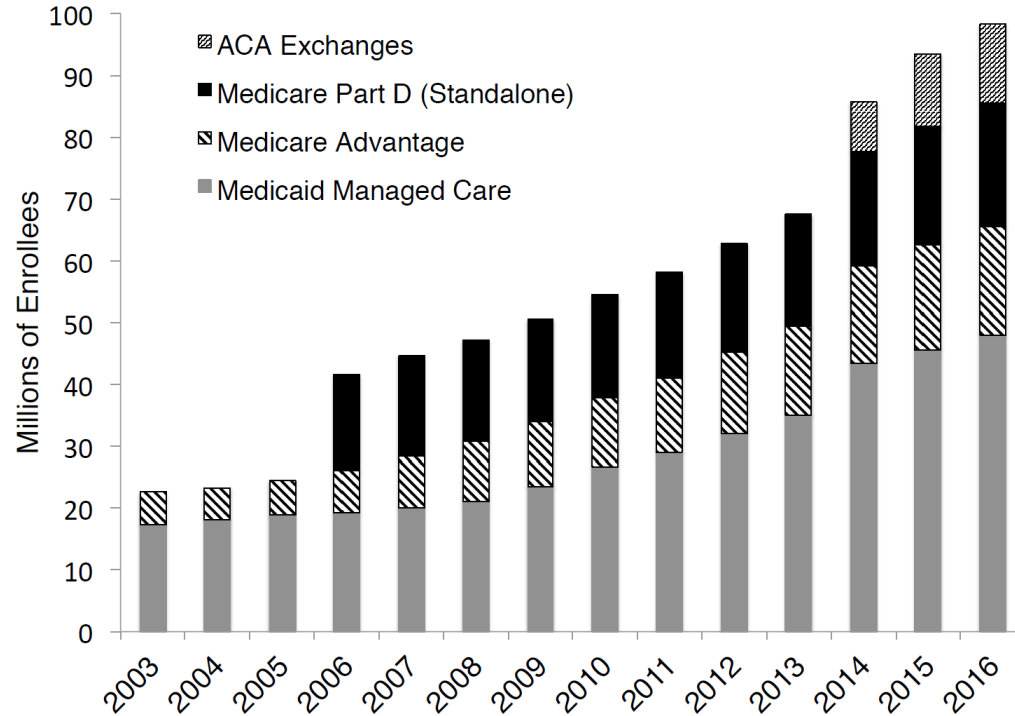
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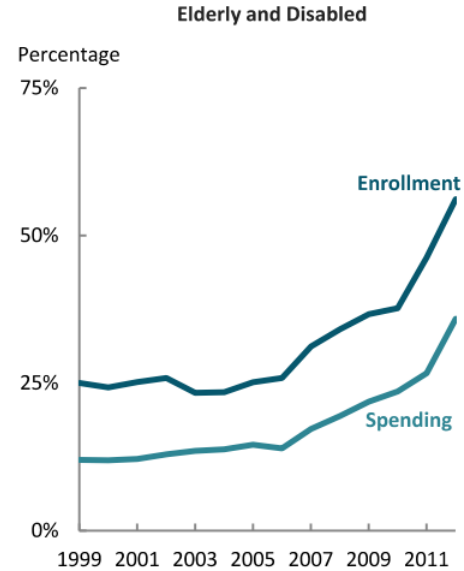
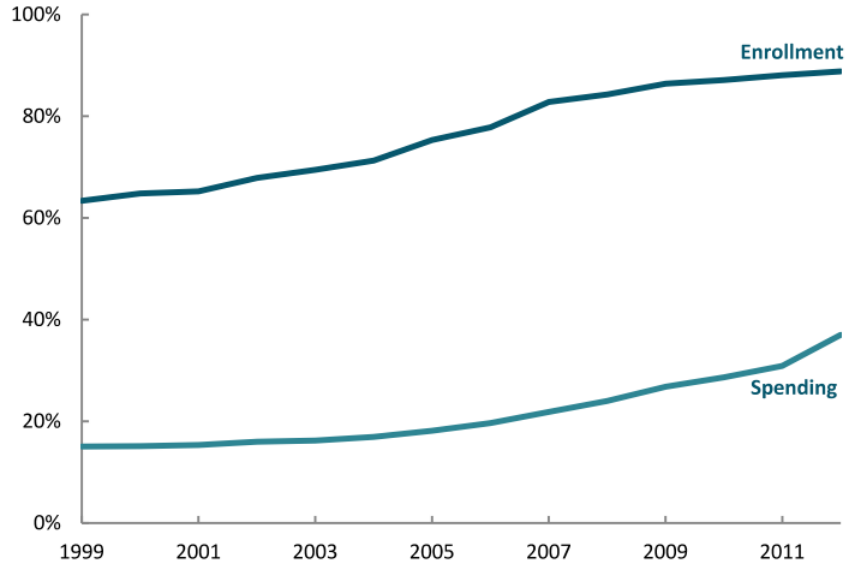
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# Social health insurance programs in the U.S have undergone rapid privatization in recent years



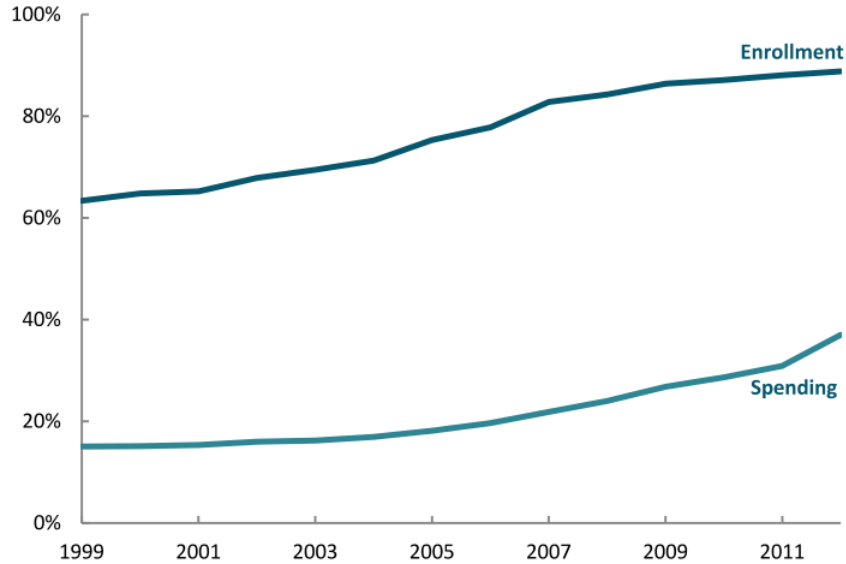
# Privatization in Medicaid



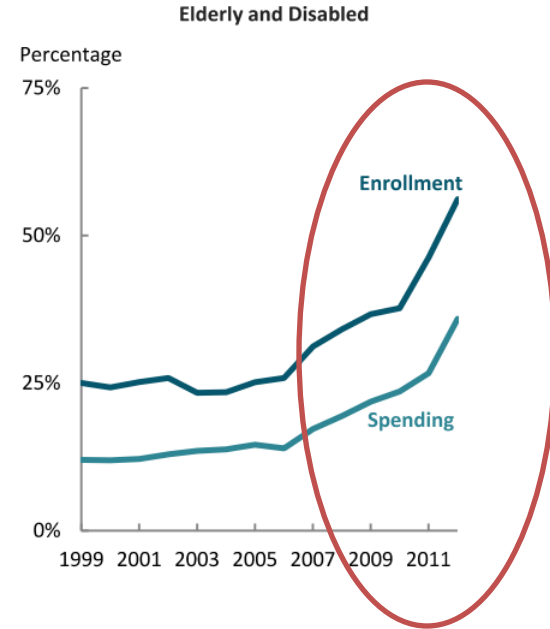
CONGRESSIONAL BUDGET OFFICE

- Privatization almost complete in terms of enrollment
- But just getting started in terms of \$\$

# Privatization in Medicaid



CONGRESSIONAL BUDGET OFFICE



- Privatization almost complete in terms of enrollment
- But just getting started in terms of \$\$

# This paper: Medicaid managed care among the disabled

In this paper, we study the consequences of the (partial) privatization of Medicaid benefits for the disabled (SSI) population

Why the disabled?

- Disabled (SSI) population are least healthy group of Medicaid enrollees
  - 13.5% of enrollment, 40% of Medicaid spending
- Allows us to get better picture of effects of privatization on healthcare
  - General Medicaid population (moms and kids) likely affected by privatization but difficult to observe due to low average healthcare use
- Also the group for which privatization question is currently most relevant
  - Portion in private plan increased from 25% in 2006 to over 50% in 2012
- What do we do?
  - Combine natural experiments (county-level introduction/mandates) in Texas and New York with rich administrative claims and enrollment data
  - Clean difference-in-differences variation in MMC implementation

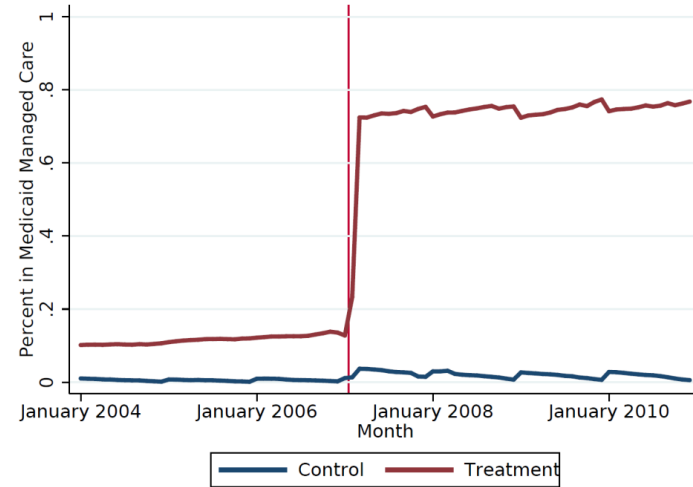
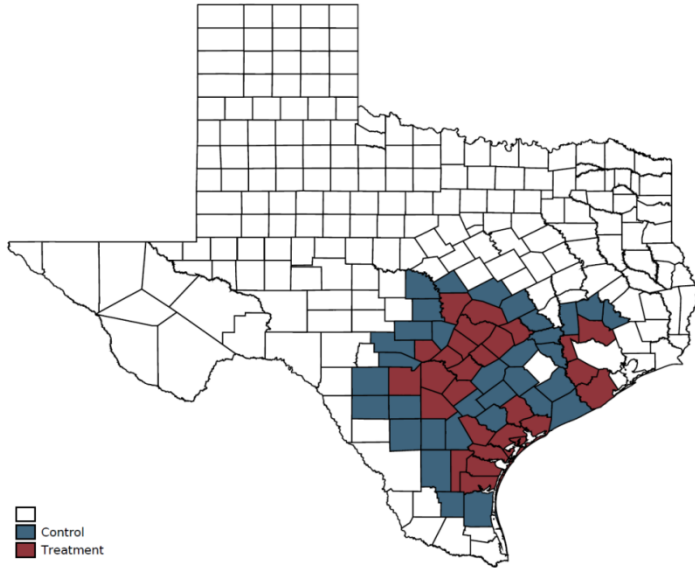
# 1. Background: MMC Program Features

# Medicaid Managed Care (MMC)

## Program Features

Program Features	Texas	New York
Start Date	February 2007	Varied by county between 2007 and 2009
Plan Payment	Fixed monthly premiums for each enrollee	Fixed monthly premiums for each enrollee
Plan design	Fixed (minimal) cost-sharing Plans set up provider networks and negotiate prices	Fixed (minimal) cost-sharing Plans set up provider networks and negotiate prices
Carve-outs	Inst'l LTC (all) Inpatient (disabled only) Drugs (all)	Inst'l and comm LTC (all) Behavioral health (disabled only) Drugs (all)
FFS drug coverage	<b>3 drugs per month prescription cap relaxed under MMC</b>	No restrictions
FFS payment rates	39 <sup>th</sup> out of 50 states	40 <sup>th</sup> out of 50 states

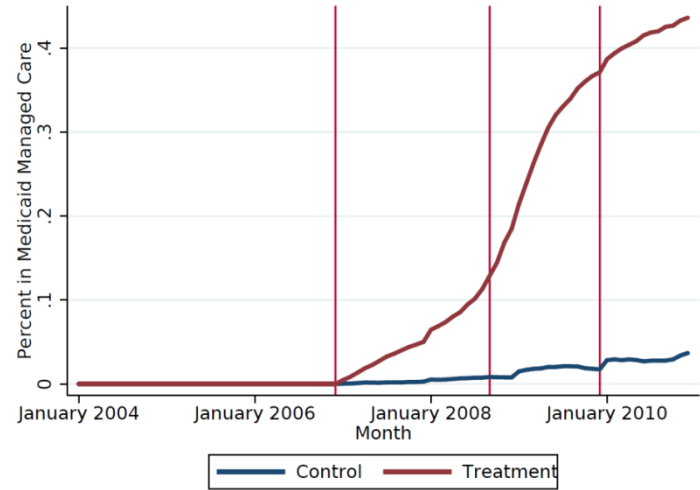
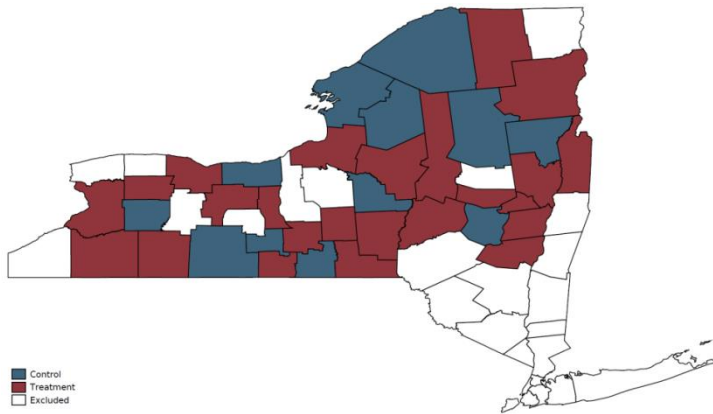
# Texas MMC Roll-out



- Treatment counties in Travis, Harris, Bexar, Nueces services areas
- Control counties contiguous to treatment counties
- MMC rolled out in February 2007; roll-out was sharp and significant



# New York MMC Roll-out



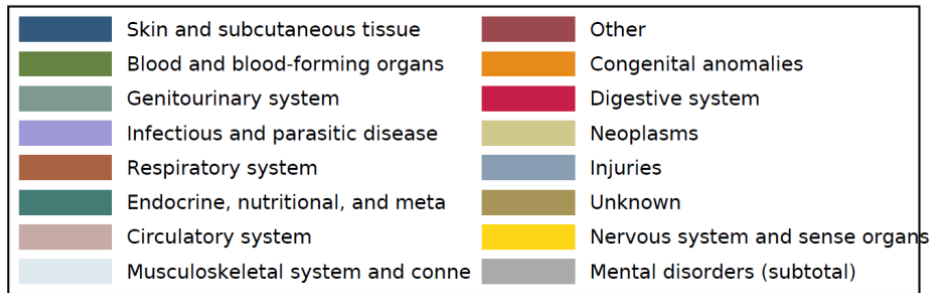
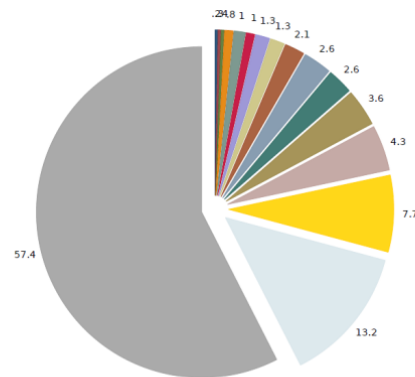
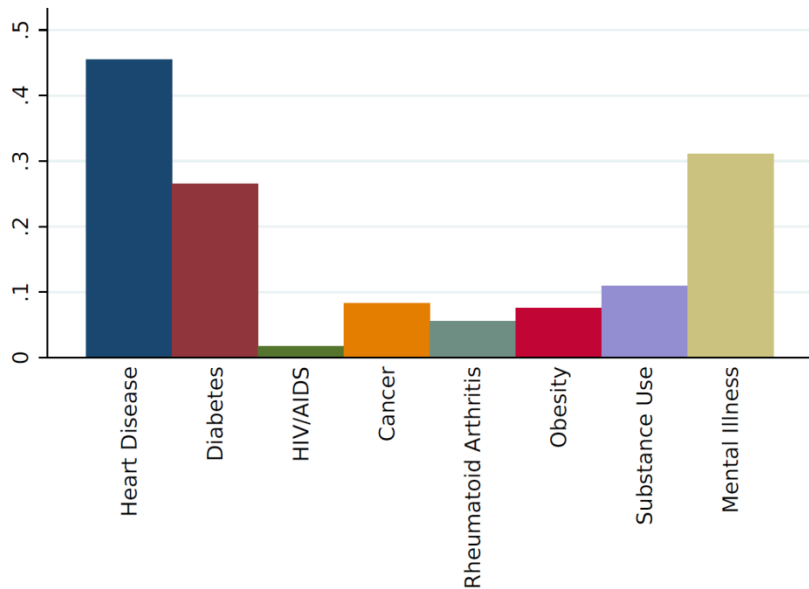
- Treatment counties: MMC rolled out AND contiguous to county in same service area without MMC
- Control counties: contiguous to treatment counties in same service area
- MMC introduced in January 2007; gradually mandated throughout 2009; messy, use to validate TX results

## 2. Data and Empirical Strategy

# Data and Sample

- Data:
  - 2004-2010 Medicaid Analytic eXtract (MAX) from CMS
  - Beneficiary characteristics and enrollment Information
  - Comprehensive claims data (inpatient, outpatient, Rx)
  - Covers everyone in FFS Medicaid and in Medicaid managed care
- Sample:
  - Construct (unbalanced) individual panel
  - Restrict to individuals:
    - Enrolled in Medicaid
    - Disabled
    - Not in Medicare
    - Over 21
    - Not in MMC prior to February 2007

# Population is sick (especially for Medicaid)



# Empirical approach

- Identification based on timing of exogenous switch from FFS to MMC in “treatment” counties; compare to contiguous control counties
- Difference-in-differences
- Control for individual fixed effects in most analyses
- Control for service area-by-year fixed effects
- Event study:

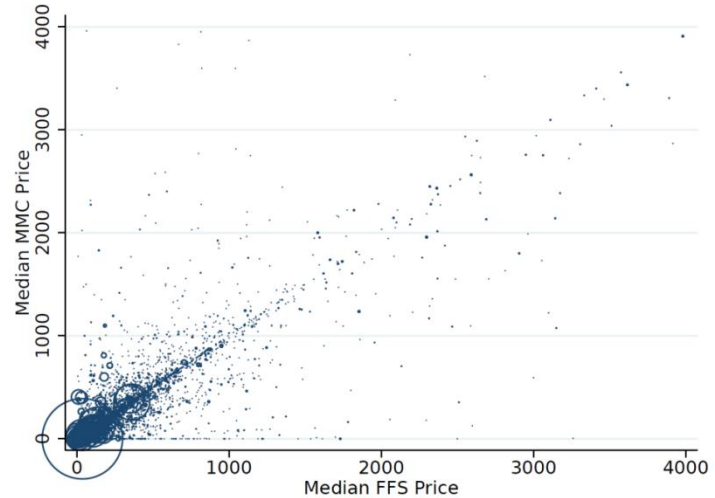
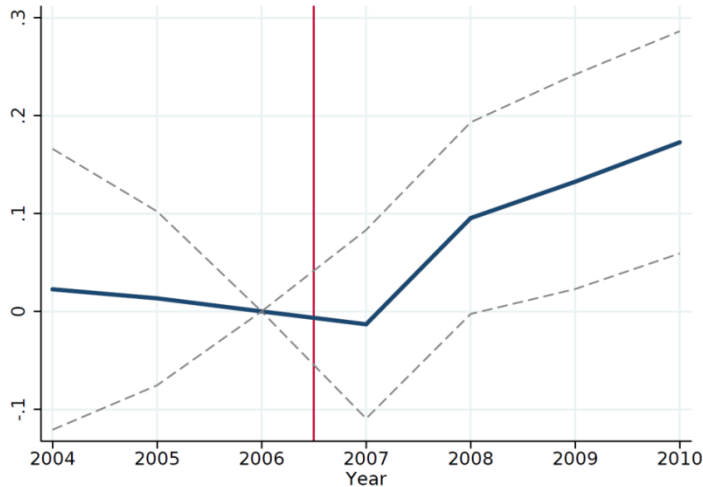
$$Y_{it} = \beta_0 + \sum_{t=2004}^{2010} \beta_t \text{Treat}_{it} + \alpha_{st} + \gamma_i + \varepsilon_{it}$$

- Incomplete takeover motivates IV:

$$\begin{aligned} \text{Private}_{it} &= \delta_0 + \delta_1 \text{Treat}_{it} \times \text{Post}_t + \alpha_{st} + \gamma_i + \eta_{it} \\ Y_{it} &= \theta_0 + \theta_1 \widehat{\text{Private}}_{it} + \alpha_{st} + \gamma_i + \psi_{it} \end{aligned}$$

## 3. Results

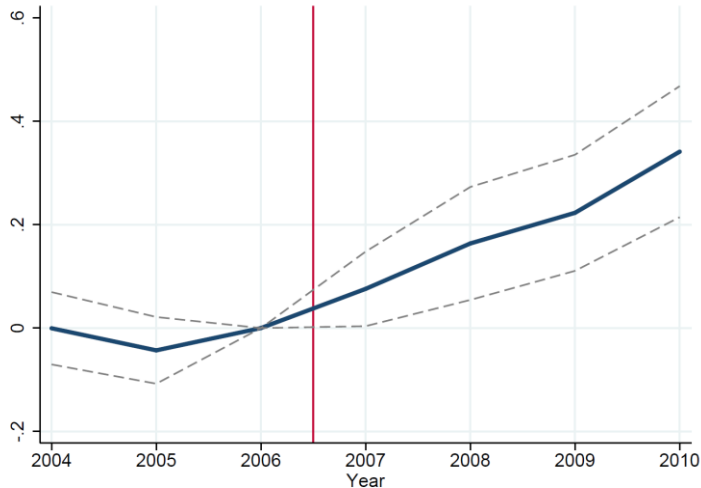
# Healthcare spending rose (Texas)



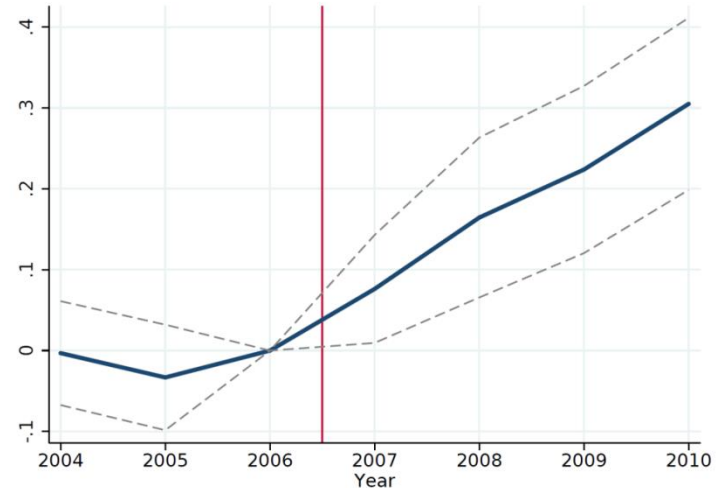
- MMC caused higher realized spending: Almost 20% by 2010
- For services for which we observe both MMC and FFS payments, prices are similar
- Suggests spending increase was due to **quantity**, not prices

# Drug utilization increased

## Log spending



## Log Days Supply

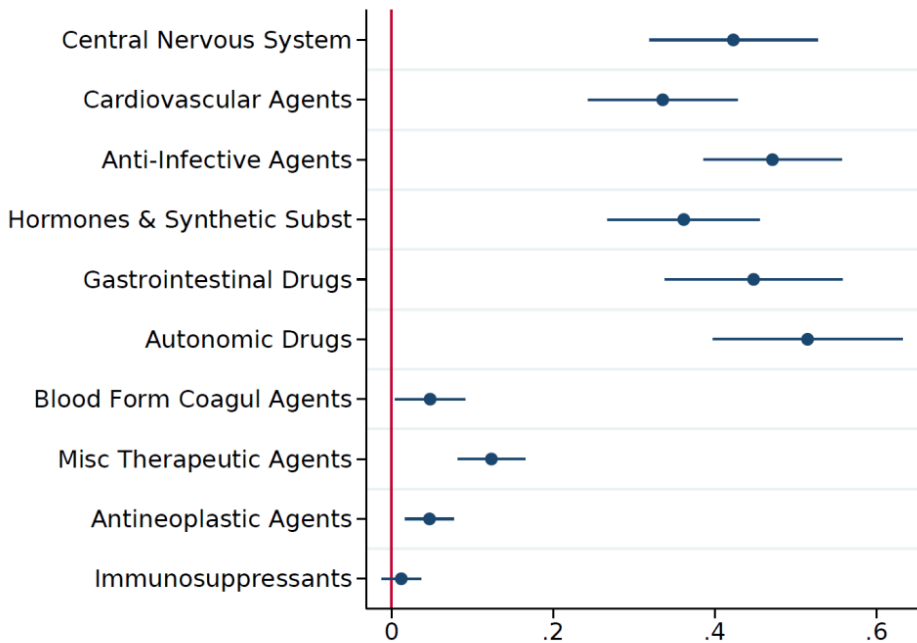


- IV: 27% spending increase; 26% days supply
- No overall extensive margin (any drugs) effects; but strong class-specific extensive margin effects
- No effect in New York

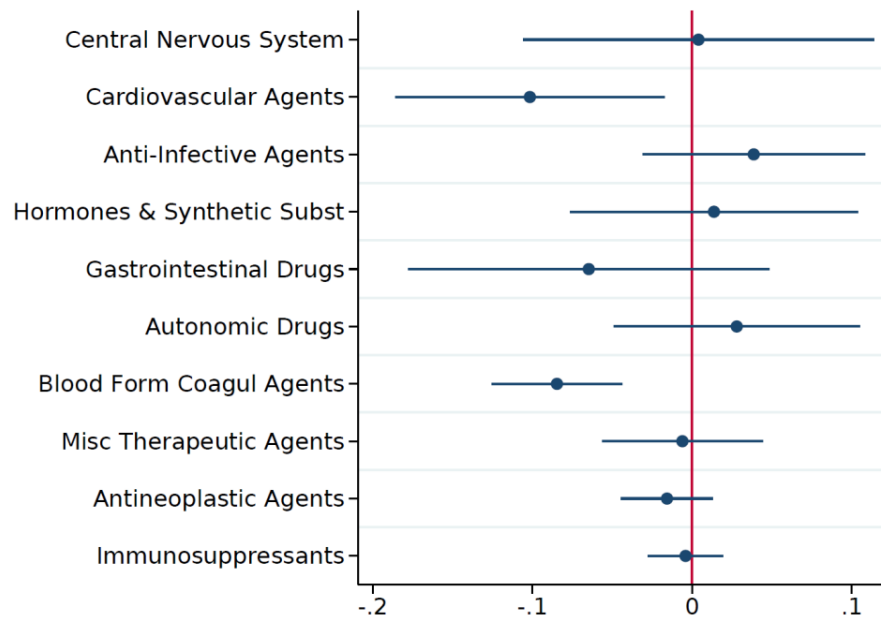


# Log Rx spending by therapeutic type

## Texas

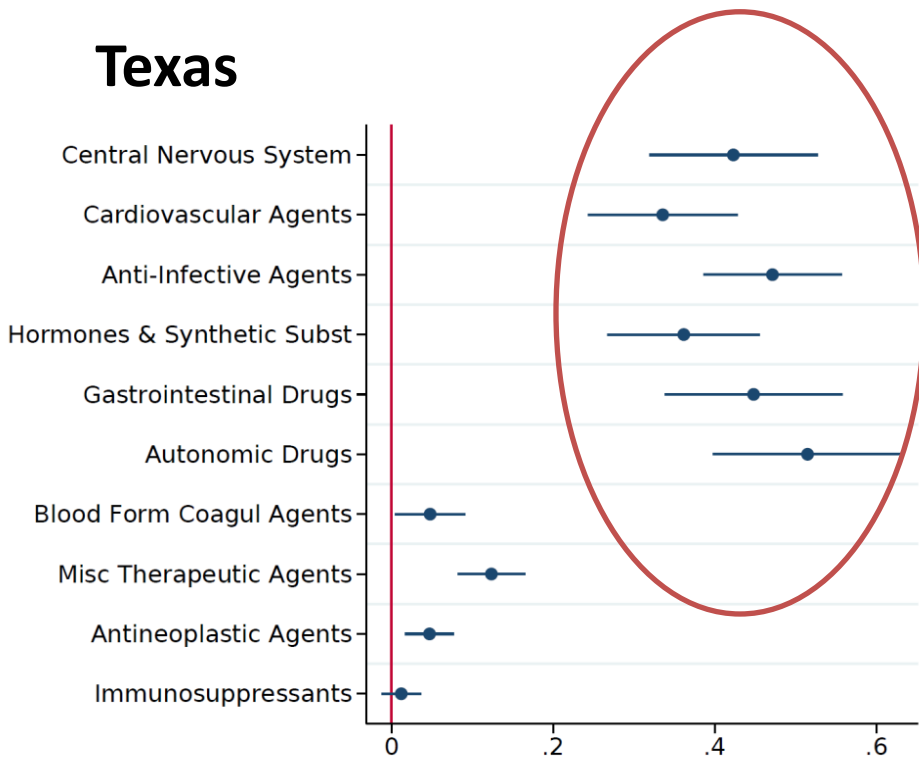


## New York

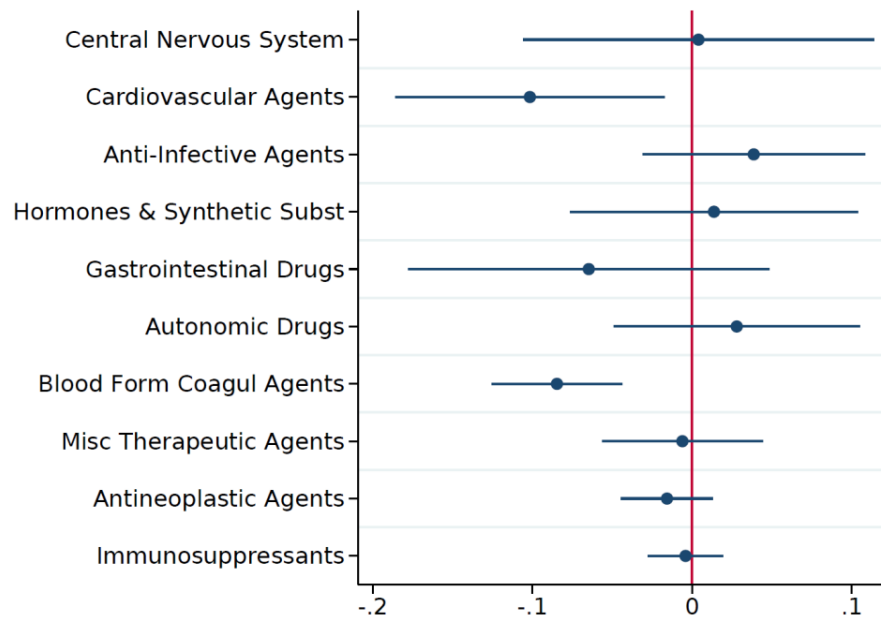


# Log Rx spending by therapeutic type

## Texas



## New York



# Reasons for the increase in Rx use

3 features can potentially explain drug result

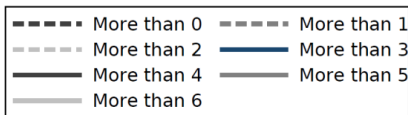
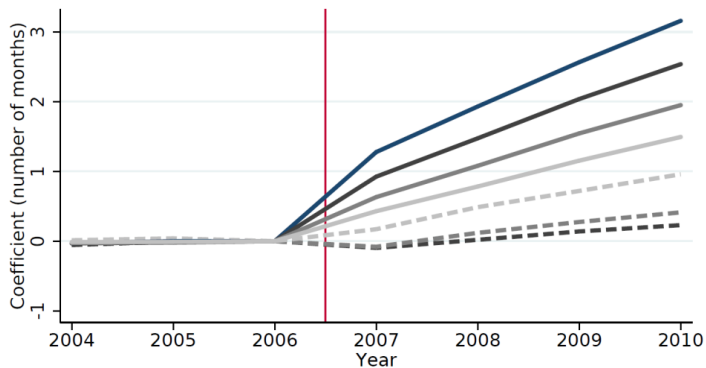
- Drug cap (TX)
- Drug carve-out (TX and NY)
- Shift to MMC for medical benefits (TX and NY)

Recall:

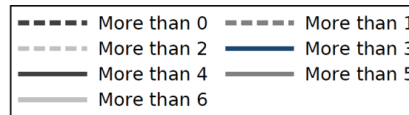
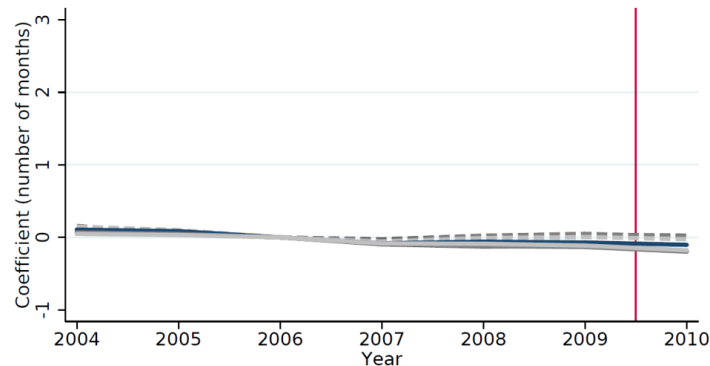
- Large effect of privatization on drug use in TX
- No effect in NY

# Drug utilization rose most for those constrained by the drug cap

Texas

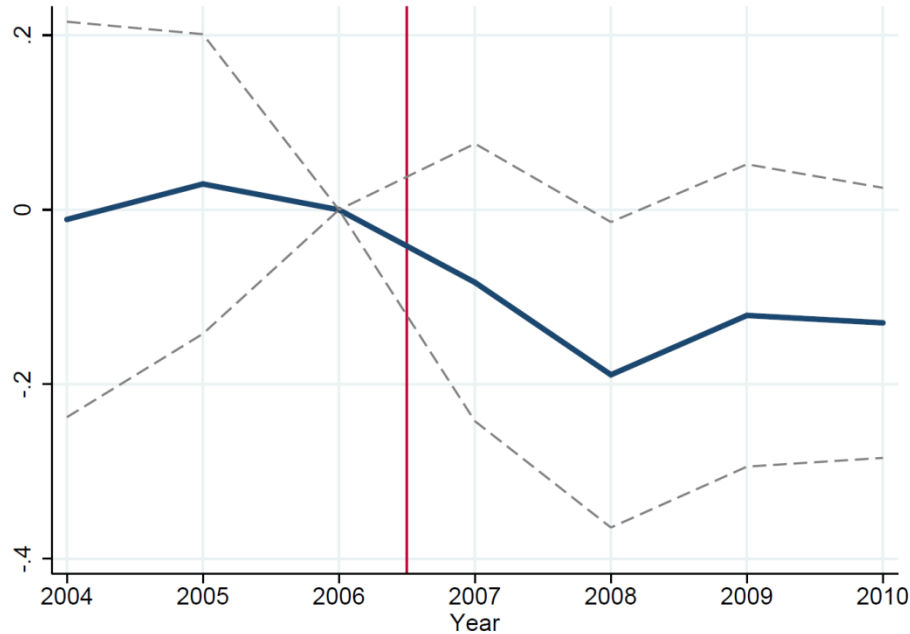


New York



- Suggests relaxing drug caps are responsible for increase in drug spending
- Important to note that drug caps are a feature of many FFS Medicaid programs; not a feature under MMC

# Log inpatient spending fell (Texas)

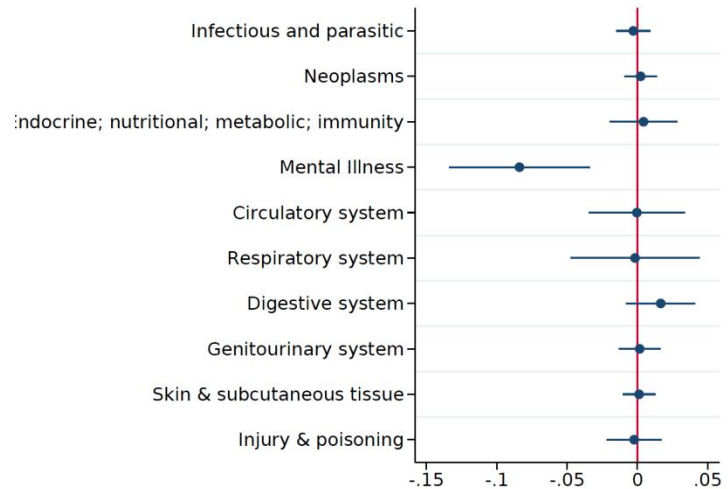
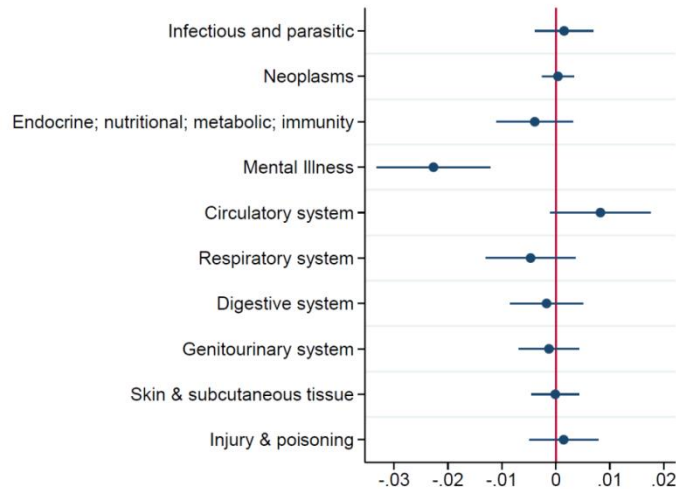


- Mostly through extensive margin (reduction in admissions)
- All driven by reduction in non-surgery admissions
- Even larger decrease in New York

# Inpatient drop driven by fewer mental health admissions (both TX, NY)

## Texas

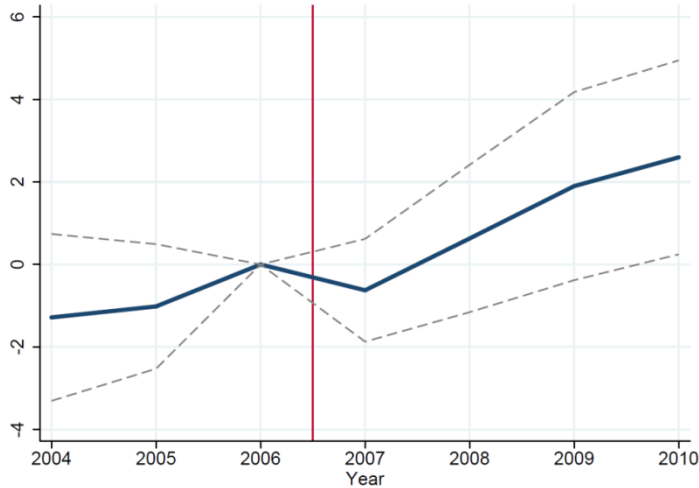
## New York



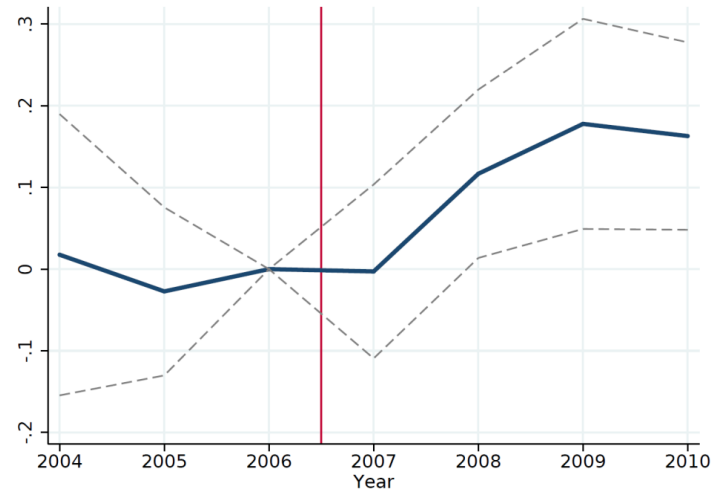
- PQI: Also find reductions in admissions related to asthma, but not COPD or CHF

# Outpatient utilization rose

## Outpatient days



## Log Outpatient Spending



- IV: 14% spending increase; 8 day increase (baseline 28); similar in NY
- No extensive margin (any outpatient days)
- Coding changes make it difficult to decompose

# Conclusion

- Find that privatization of Medicaid for SSI beneficiaries raised spending, but increases are consistent with quality improvements
- No obvious stinting/quality deterioration
- Suggests privatization of health insurance for this complex population does not do harm, and may be beneficial
  - Costs more money, but that money goes to providers/patients (not plans)
  - Some state FFS plans ration care to SSI beneficiaries to control costs
- Features of both the public and private programs matter when considering consequences of privatization → consequences may vary by state
- Next steps: examine effects on SSI outcomes—employment and mortality