



# Mental Health and Substance Abuse Block Grants and the Demand for MH/SA Services in the Private Sector

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*Presented by*

Alexander Cowell, Ph.D.



# Contributors

*Coauthor*

Jeremy Bray, Ph.D.

*Other Contributors*

Janet Cummings

Kay Miller

Shu Wen Ng

Eva Witt

*Government Project Officer*

Ronald Manderscheid, Ph.D.

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# Previous Research

- Increased federal MH and SA block grant allocations increase state spending on MH/SA programs (Jacobsen & McGuire, 1996)
- SA block grant funding has no significant effect on state or local SA expenditures (Gamkhar & Sim, 1999)
- No study has examined the association between block grant funding and private sector MH/SA expenditures

# Link Between Block Grants and Private Sector Expenditures

An increase in block grant funding may:

- Decrease private sector expenditures
  - Claimants may seek care in the public sector instead of the private sector (crowd out effect)
- Increase private sector expenditures
  - Improved infrastructure may increase the demand for MH/SA services in both the public and private sector (crowd in effect)
- Have no effect
  - The public and private sectors may serve completely separate populations



# Objectives

- To estimate the association between block grant funding and the proportion of private sector fee-for-service (FFS) claimants seeking MH/SA care
- To estimate the association between block grant funding and average MH/SA payments per MH/SA claimant in the FFS private sector



# Data

- 1997 FFS Marketscan data from the MMMC project database
- Mental health and substance abuse block grant funding allocated by the federal government to states (source: OAS, SAMHSA)
- Other state-level variables controlling for state differences:
  - Per capita arrest rates for DUI offenses, drug offenses, violent crimes, and property crimes
  - Jail sentences and fines for marijuana offenses
  - Beer and cigarette taxes

# Methods

- **Two Outcome Variables:**
  - Probability of making an MH/SA claim (logit)
  - Conditional on making a claim, log of MH/SA payments (regression)
- **Explanatory variables of interest:**
  - Log of state per capita MH block grant dollars
  - Log of state per capita SA block grant dollars
- **Control Variables**
  - Demographics (age, gender)
  - Months of eligibility
  - Chronic medical conditions
  - State per capita SA expenditures
  - Health insurance plan generosity
  - State level policy variables

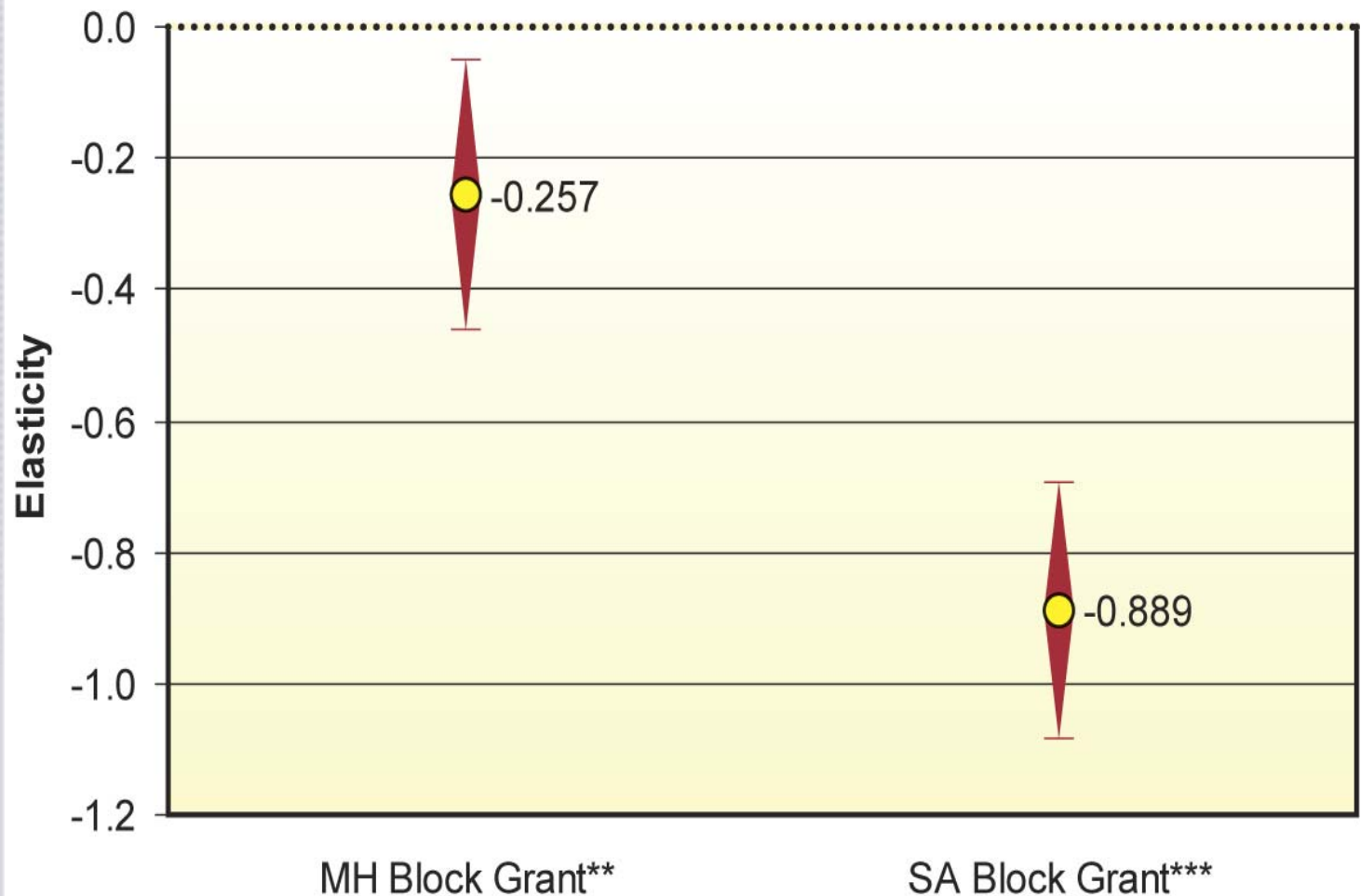
# Methods (cont'd)

- All analyses weighted to represent the full fee-for-service Marketscan claimant population
- Estimate elasticities
  - E.g. if the elasticity of the probability of seeking MHSA care with respect to the MHBG = 1 ...
  - ...then a 1% increase in the MHBG is associated with a 1% increase in the probability of seeking care

# Characteristics of Analysis Sample

- 328,906 claimants; 108,754 of which sought MH/SA care (33%)
- 58% female
- Mean age is 36
- Mean per capita MH block grant allocation is \$0.94
- Mean per capita SA block grant allocation is \$4.58
- Mean annual MH/SA payments per MH/SA claimant are \$950

# Probability of Seeking MH/SA Care: Estimated Elasticities

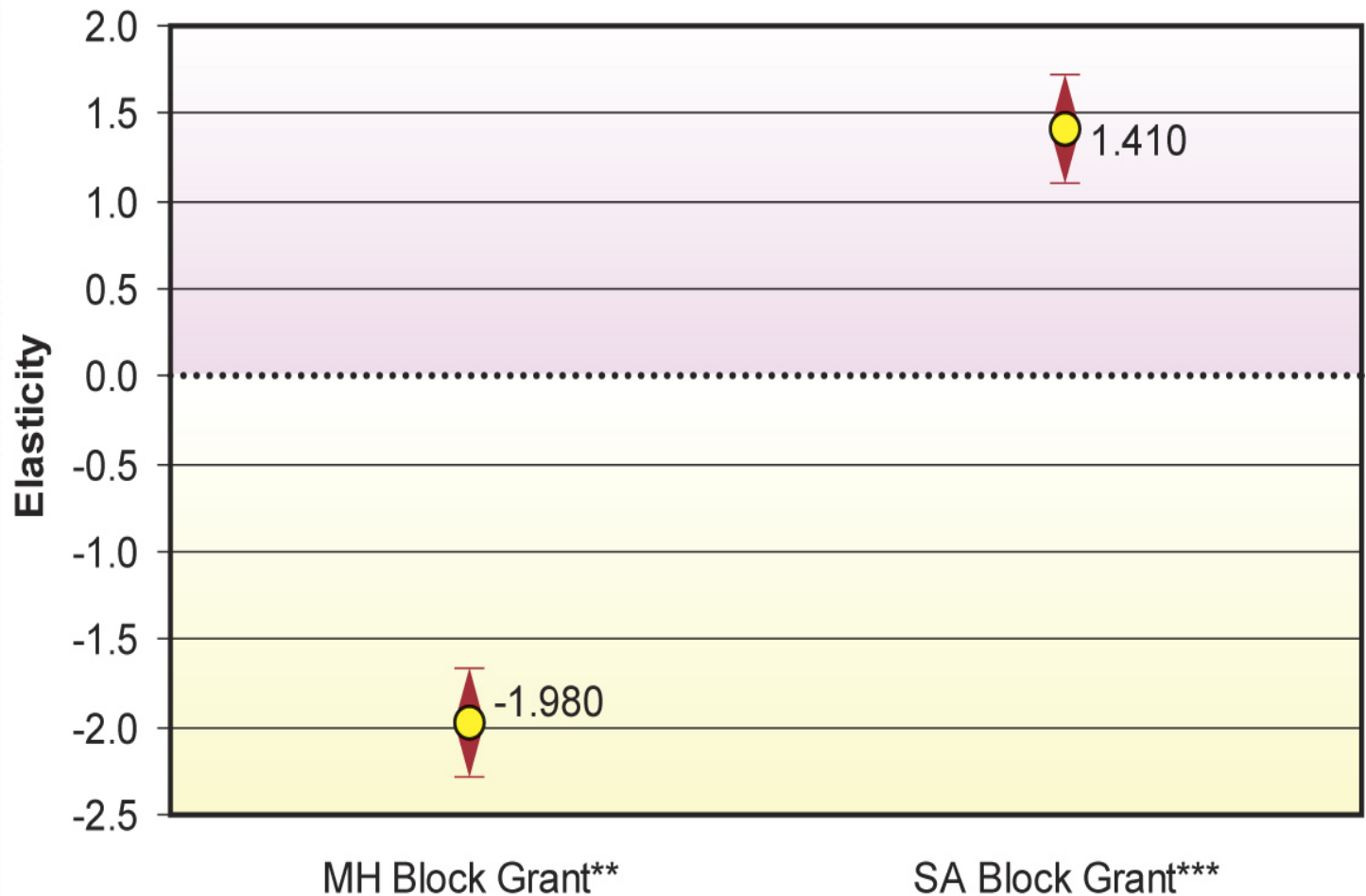




# Interpretation

- What is the effect of a 10 percent **increase** in per capita block grant funding on proportion of FFS Marketscan private sector seeking care?
- MHBG from \$.94 to \$1.03:
  - 2.57 percent **decrease**
  - or approximately 2,800 claimants
- SABG from \$4.58 to \$5.04:
  - 8.89 percent **decrease**
  - or approximately 9,700 claimants

# Conditional MH/SA Payments: Estimated Elasticities



# Interpretation

- What is the effect of a 10 percent **increase** in per capita block grant funding on expenditures?
- MHBG from \$.94 to \$1.03:
  - 19.8 percent **decrease**
  - or approximately \$190 per claimant
- SABG from \$4.58 to \$5.04:
  - 14.1 percent **increase**
  - or approximately \$134 per claimant



# Total Cost Implications

- Caveats:
  - Only applies to FFS private sector Marketscan 1997
  - Simulations at average values
  - Cross-state comparison
- 10% increase in
  - MHBG → A total **decrease** in MH/SA payments of approximately **\$22 million**
  - SABG → A total **increase** in MH/SA payments of approximately **\$4 million**



# Discussion

- Why are there differences in the results for MH and SA block grant funding?
  - Relative magnitude of MH and SA block grants
  - Differences in use of MH and SA block grant funds
- Need to look at changes in number of people served in public sector as well as private sector



# Limitations

- Results are obtained from cross-state comparisons, not from within-state changes
  - Omitted variables bias
  - Models are correlations, not causal
- Current payment variable does not separate MH payments from SA payments
- Claimants only, not enrollees
- What about the public sector?



# Future Directions

- Conduct similar analyses in the public sector (Medicaid, Medicare <65, Medicare 65+)
- Use multiple years of data to examine within state changes and possible lag effects
- Conduct separate analyses for MH claimants and SA claimants
- Expand analyses to all enrollees, not just claimants



# Future Directions (cont'd)

- To examine causality need stronger theoretical foundation
- Need a better sense of how block grant funds are really spent within state
- Hierarchical linear modeling