

An Assessment of the Impact of an Educational Pharmacy Management Intervention on Prescribers to Medicaid Beneficiaries

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Background

- **State Medicaid programs are major purchasers of antipsychotic and antidepressant medications**
 - **About one-fifth of state Medicaid drug expenditures in 2005¹**
- **Budget pressures have caused many states to impose stringent limits on beneficiary drug use**
- **More than 20 states have been using the Behavioral Pharmacy Management Program (BPMP)**
 - **Implemented by Comprehensive NeuroScience, Inc. (CNS)**

¹Bagchi, A. J. Verdier, and D. Esposito. "Chartbook: Medicaid Pharmacy Benefit Use and Reimbursement in 2005." Washington, DC: Mathematica Policy Research, Inc., June 2009.

BPMP Clinical Edits and Mailings

- BPMP identifies potentially inappropriate prescribing and use of psychotropics, in six broad categories:
 - Any use of certain psychotropics for children
 - Polypharmacy
 - Dosage (too high or too low)
 - Drug switching for adults
 - Prescribing by multiple prescribers
 - Therapy discontinuation
- Prescribers who trigger any clinical edit may be sent two types of intervention mailings
 - *Clinical Considerations*TM letter for edits in the first four groups
 - Alert for edits in the last two groups



BPMP Design and Mailing Components

PROGRAM DESIGN

Clinical edits can be:

- Targeted: Included in mailings to prescribers
- Non-targeted: Not included in mailings to prescribers

MAILING COMPONENTS

- A cover letter describing the intervention
- A prescriber feedback form
- Information on the quality indicator areas from which they deviated
- All patients identified by one or more clinical edits

UTAH IMPLEMENTATION

- Phase I (Mar 2004 to Nov 2005): 297 prescribers (average 8 letters)
- Phase II (Mar 2006 to Jan 2007):
 - 145 prescribers to adults (average ~ 3 letters)
 - 89 prescribers to children (average ~ 3 letters)



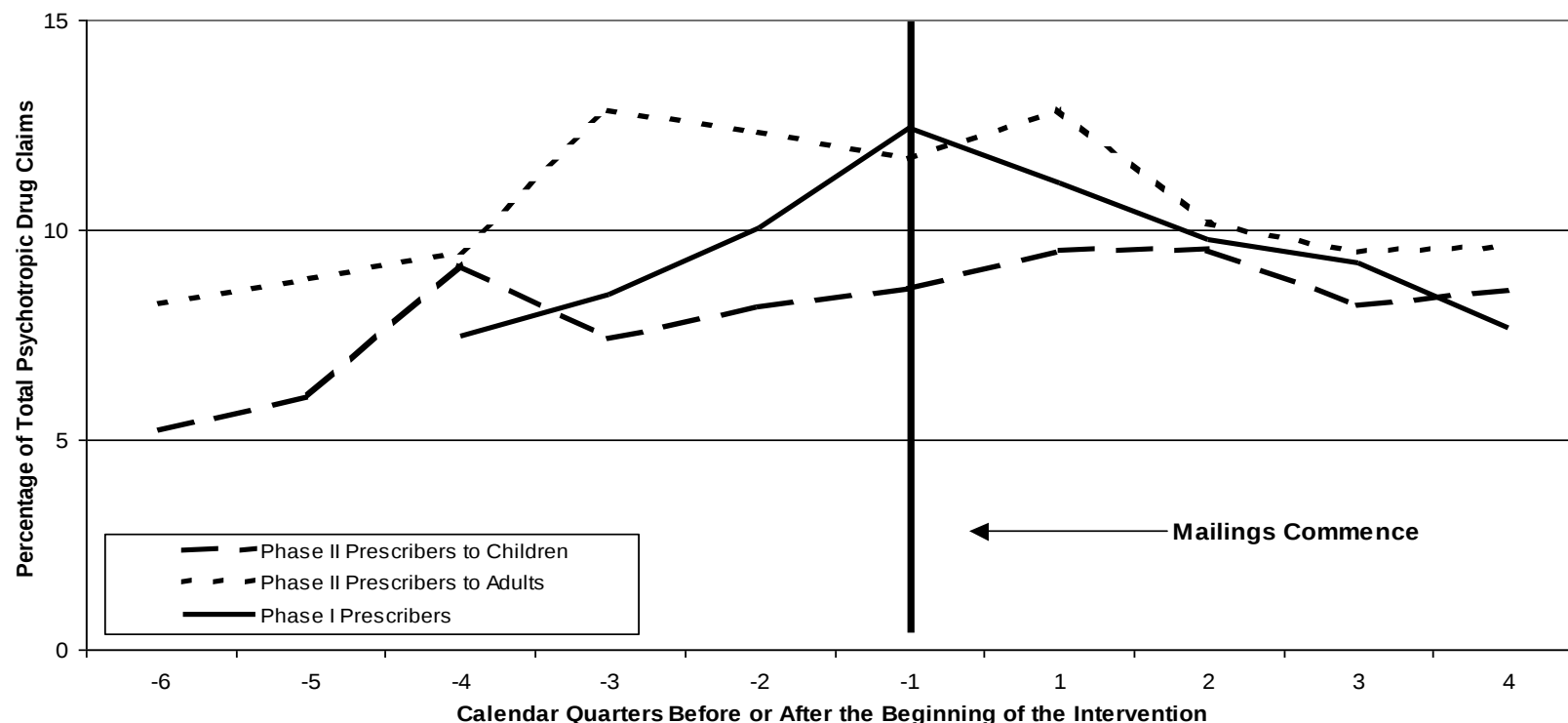
Evaluation Design

- **Estimated effects for:**
 - *Clinical Considerations*TM letters
 - Alerts for multiple prescribers and therapy discontinuation
- **Primary outcome measures estimated for each calendar month for each prescriber included:**
 - As a percentage of total psychotropic claims/costs:
 - *Targeted* clinical edits, outlier claims, and outlier costs
- **Segmented Regression Analysis**
 - Compare outcomes for treatment group (prescribers who were mailed letters) versus the comparison group (prescribers who were not mailed letters) across time



Behavior Before and After Prescribers' First Clinical Considerations™ Letter in Utah

Outcome Measure: Targeted Claims as a Percentage of Total Drug Claims

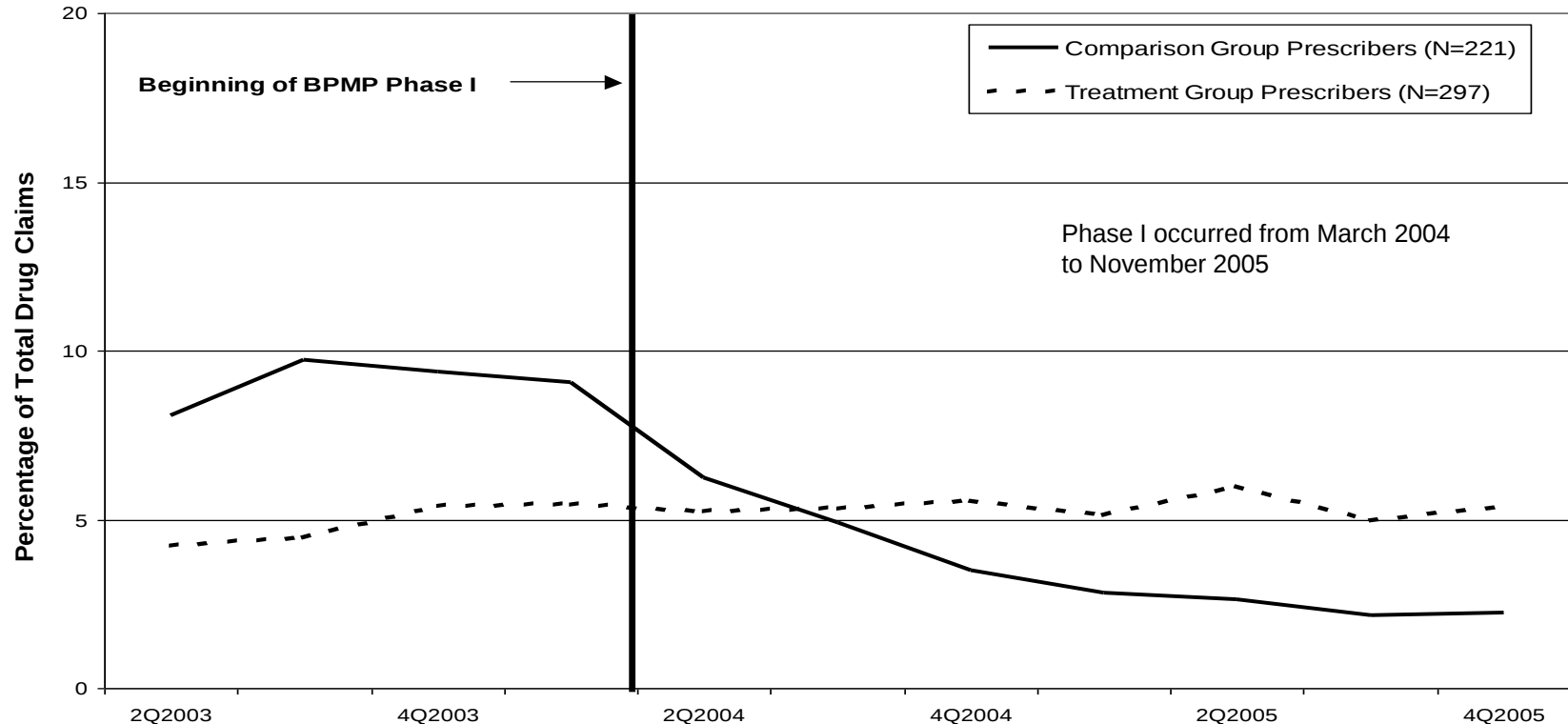


Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: In Phase I, 297 prescribers were mailed letters. In Phase II, 145 prescribers to adults and 89 prescribers to children were mailed letters. Prescriber data shifted so that all months before the first intervention letters represent the pre-intervention period.

Phase I: Treatment Group Prescribing Worse than Comparison Group Trend in Utah

Targeted Claims as a Percentage of Total Drug Claims for All Prescribers



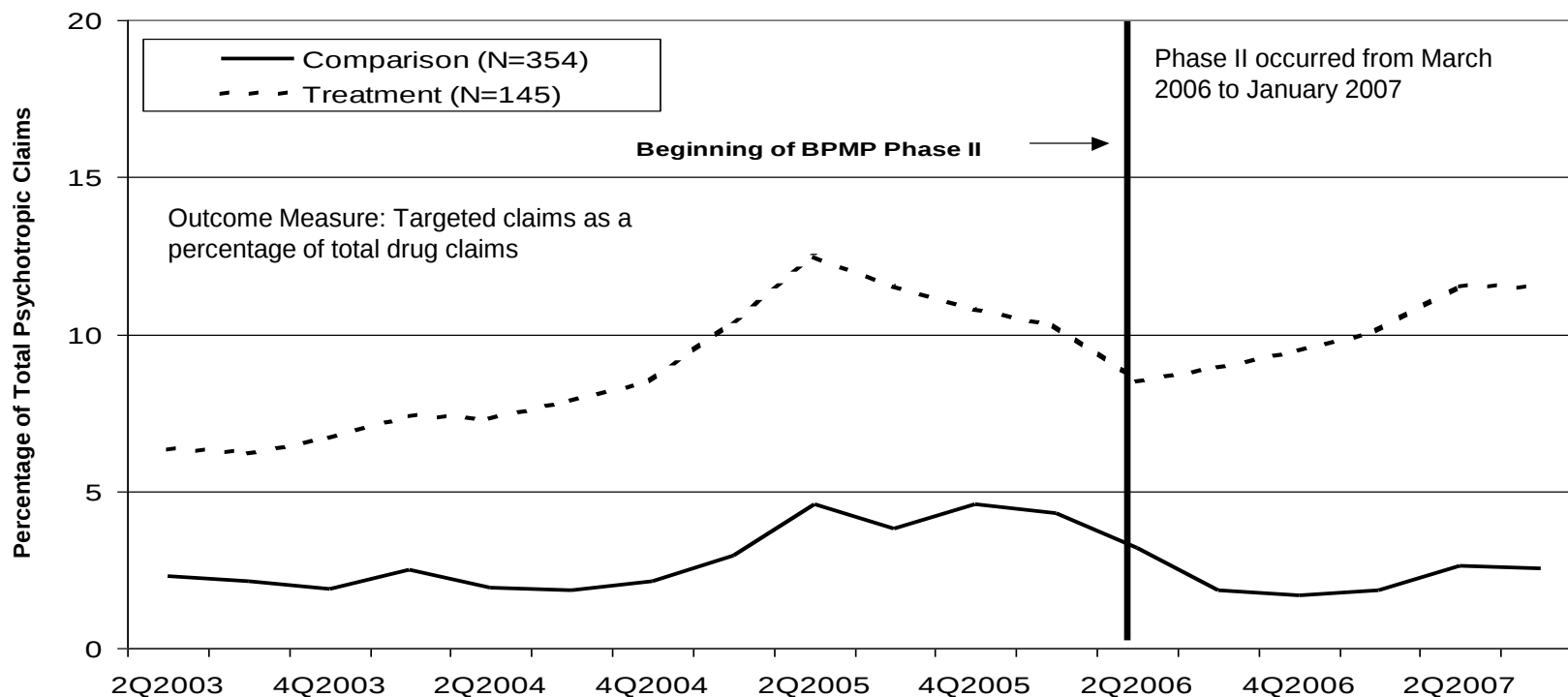
Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: Among prescribers who were mailed letters from March 2004 to November 2005 (297 total prescribers) and not mailed letters but who had targeted claims (221). Includes all data from April 2003 through December 2005.



Phase II: Little Difference Between Treatment and Comparison Group Prescribers to Adults in Utah

Outcome Measure: Targeted Claims as a Percentage of Total Drug Claims

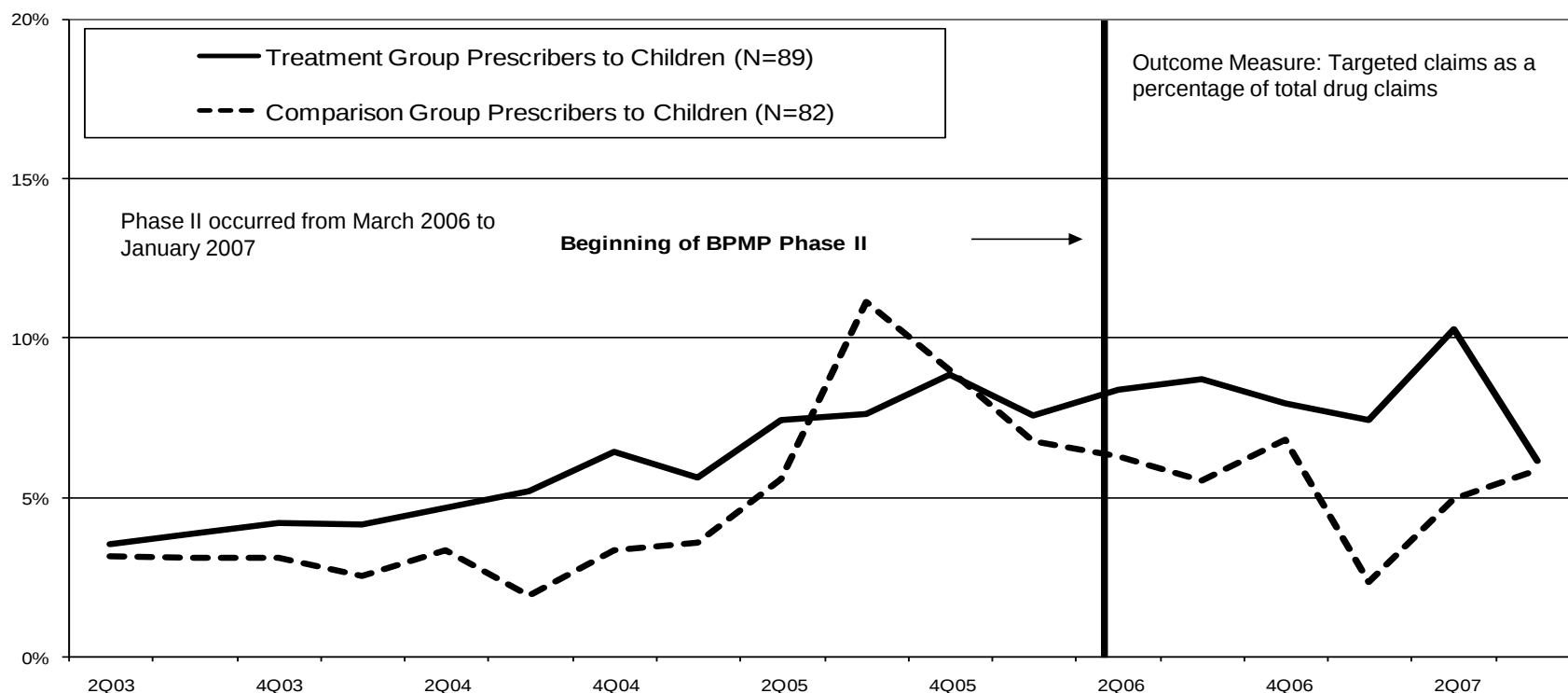


Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: Among 145 prescribers who were mailed letters from April to December 2006 and 354 comparison group prescribers who were not mailed letters but had targeted claims (data from April 2003 through September 2007).

Phase II: Very Small Differences Between Treatment and Comparison Group Prescribers Near End of Intervention

Among Treatment and Comparison Group Prescribers to Children in Utah

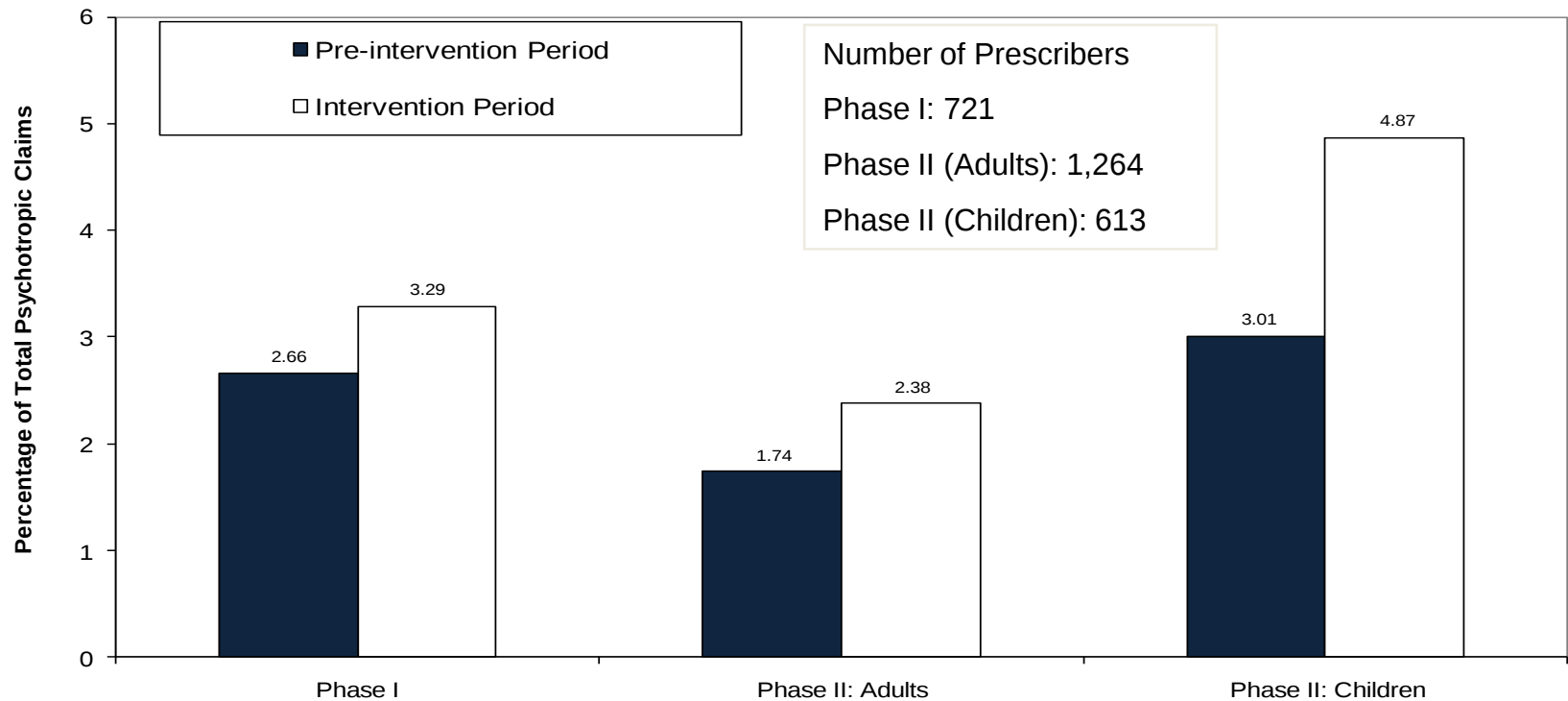


Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: Includes data from April 2003 to September 2007, which are shifted so that months before the first letters are the pre-intervention period. The comparison group is prescribers to children who had targeted claims but were not mailed letters. Comparison group prescribers had fewer monthly claims (12% as many) compared with the treatment group.

More Instances of Multiple Prescriber Alerts After Intervention Begins

Targeted Claims as a Percentage of Total Claims in Utah

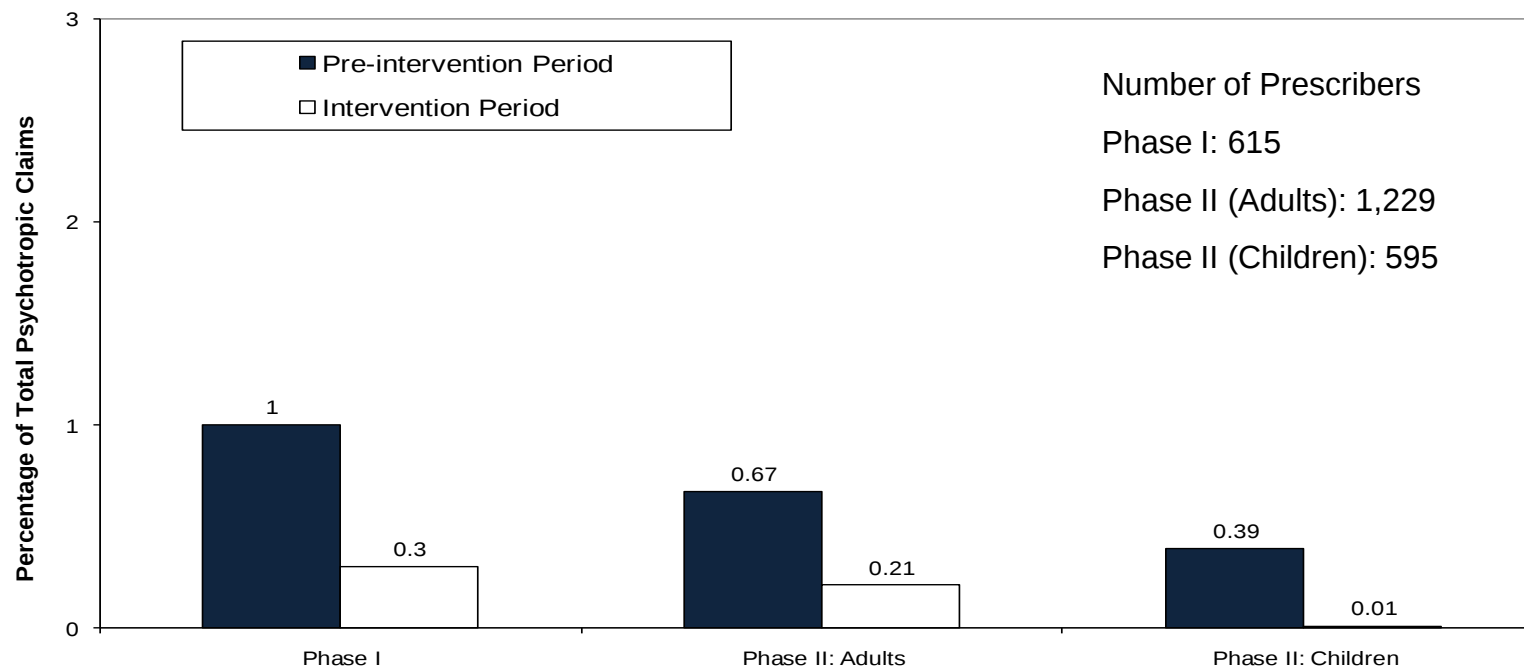


Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: Includes data from April 2003 to September 2007 for prescribers who were mailed an alert and had at least one claim associated with a multiple prescriber edit in the six months before their first alert. Because all prescribers who qualified for an alert received one, no comparison group was available.

Fewer Instances of Therapy Discontinuation After Intervention Begins

Targeted Claims as a Percentage of Total Claims in Utah



Sources: Utah Medicaid pharmacy data and BPMP intervention data

Note: Includes data from April 2003 to September 2007 for prescribers who were mailed an alert and had at least one claim associated with a therapy discontinuation edit in the six months before their first alert. Because all prescribers who qualified for an alert received one, no comparison group was available.

BPMP Design in Utah: Many Common Edits Not Targeted

Most Common Clinical Edits and Average Cost per Claims Before Phase I

Clinical Edit	Targeted Status	Percent of All Clinical Edits	Average Cost per Claim	Total Cost of Claims
3+ psychotropics for 60+ days	No	37.2	\$97	\$2,730,000
1+ benzodiazepines and 1+ antidepressants for 60+ days	No	9.6	\$45	\$327,000
5+ psychotropics for 60+ days	Yes	6.5	\$107	\$528,000
2+ antipsychotics for 60+ days	Yes	5.0	\$188	\$707,000
Higher than recommended dosage of atypical antipsychotic for 45+ days	Yes	1.5	\$346	\$398,000
2+ atypical antipsychotics for 60+ days	Yes	3.3	\$220	\$545,000
Other Targeted (20 total)	Yes	13.9	\$100	\$1,058,000
Other Non-targeted (24 total)	No	23.1	\$132	\$2,312,000

Total number of edits targeted was 24 and non-targeted was 26.



Policy and Program Design Implications

- **Limited impact of BPMP mailings**
 - Impacts were small, not statistically significant, and similar to fluctuations observed in pre-intervention periods
- **Keep expectations modest**
 - Administrative costs would have to be small for BPMP to be worthwhile because impacts were small
- **More aggressive intervention options**
 - States have the option of using edits more aggressively, such as prior authorization for prescribers who trigger edits
- **Importance of program design**
 - Consider which edits to target and their rationale (most common, highest cost, greatest clinical importance)

