

Medicaid cutbacks  
and state mental hospital utilization  
by people with schizophrenia

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people with schizophrenia

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# Presenter Disclosures

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# Research question

What happens to Medicaid clients with schizophrenia who lose coverage for mental health services?

# Agenda

- Medicaid history, present, future
- Medicaid experiments
- People with schizophrenia and Medicaid
- Oregon Medicaid cut-backs
- Study design
- Results
- Conclusions
- Limitations

# Research answer

Increased use of state mental hospital



In press

Psychiatric Services 2011

# Medicaid definition

Joint federal-state health insurance program for the poor and-or disabled

Outpatient care (mental health, substance abuse, physical health)

Pharmacy

Inpatient general hospital psychiatric care

Often does not cover state mental hospital

Children's Health Insurance Plan (CHIP) - some states

Long term care

# Medicaid

Oregon Health Plan

# Medicaid programs

- Badger-care
- Diamond State Health Plan
- Hoosier Healthcare
- Husky Healthcare
- Medallion
- Medi-Cal
- Mountain Health
- Passport to Health
- Rite-care
- Salud!
- Star Health

# Medicaid perception

“Medicaid is a disease of denial --  
we hate it and we don't want to talk about it”

Pediatrician 1992

# Medicaid

- History
- Present
- Who cares?
- Future
- Experiments

# Medicaid history

Congressman: “Will the United States ever have a functioning health care system?”

God: “Yes, but not in my lifetime”

1965

# Medicaid present

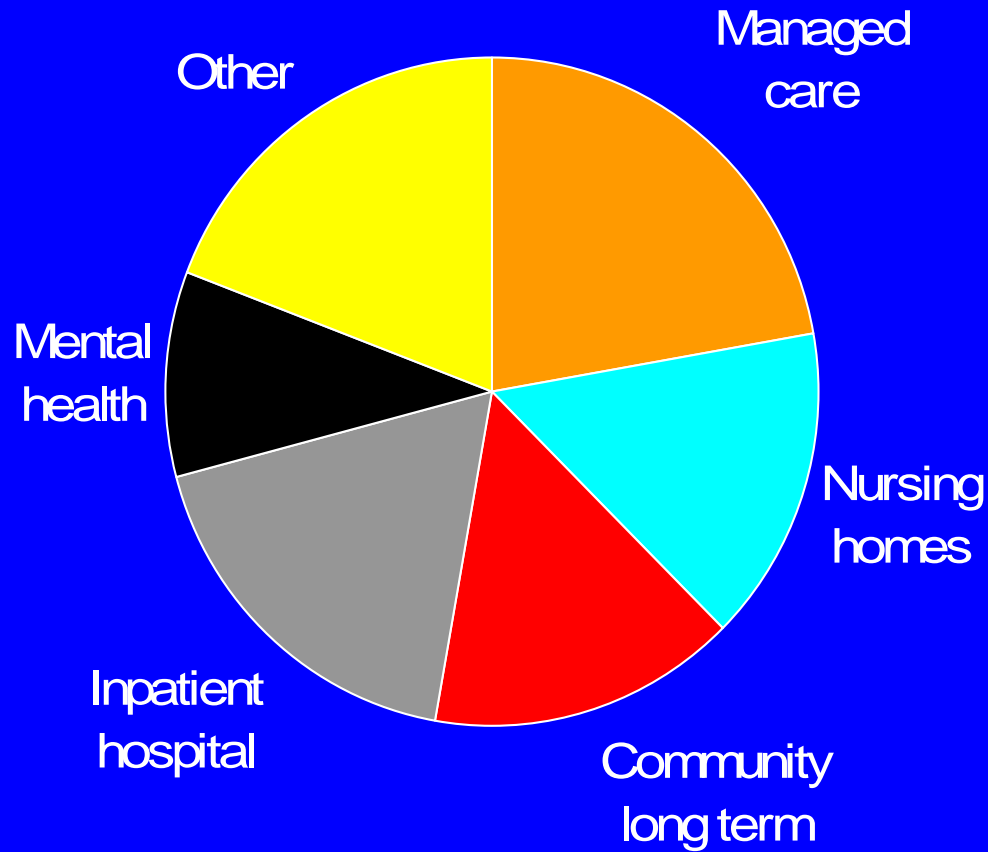
- 68 million people (at some time in 2010)
- \$406 billion per year
- \$40 billion for mental health (estimated)

Iglehart New England Journal of Medicine 364:1585, 2011

Levit et al. Health Affairs 27:w513, 2008



# Medicaid present



# Medicaid present

25% of mental health spending

Levit et al. Health Affairs 27:w513, 2008

Medicaid

Who cares?



# Patient Protection and Affordable Care Act

- Obama-care
- Medicaid expansion
- 16 million persons added to Medicaid
- 4 million people with severe mental illness

Garfield et al. Am J Psychiatry 168:486, 2011



# Medicaid and the states

- Overall state share fiscal year 2010: 33%
- 21% of state spending (2010)
- Overall state share fiscal year 2011: 43%
- Expenditures unpredictable
  - Medicaid expenses grow during recessions
  - State revenues shrink during recessions
- Eligibility determined (in part) by states

National Health Policy Forum, GWU, 2009

Fiscal Survey of States, National Governors Association, 2010

Pear, New York Times, June 15, 2011





# Medicaid future

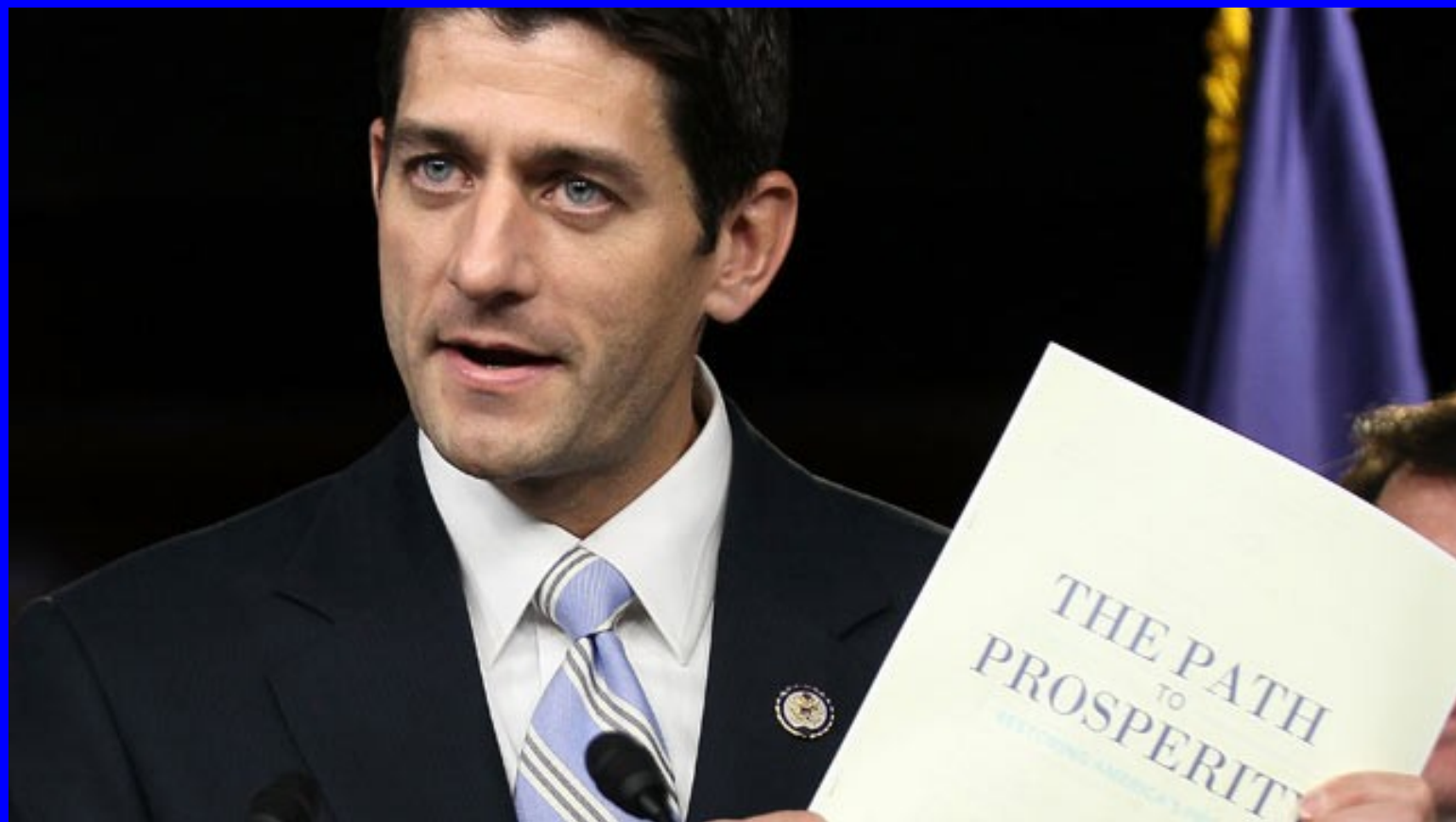
“Health care is the major player  
at the heart of our fiscal crisis”

Peter G. Peterson Foundation, 2010

# Medicaid and deficit

Entitlement

Not discretionary



# Medicaid future

- House Budget plan
- Representative Ryan
- Medicaid as block grant
- Save \$750 billion in ten years versus Medicaid under Affordable Care Act

Holahan et al. House Republican Budget Plan,  
Kaiser Family Foundation, 2011

# Medicaid future

## Two views

More Medicaid (Obama-care)

Less Medicaid (Ryan-care)

# Policy question

What might be expected under Ryan-care?

# Theory question

What is the effectiveness of  
treatment as usual?

# Treatment as usual discontinuation

- Endogenous (e.g., worsening psychosis)
- Exogenous (e.g., Medicaid policy change)



# Effectiveness of treatment as usual

“No causation without manipulation”

Holland J Am Statistical Assn 81:945,1986

# Experiments

- Human subjects committee approval
  - Informed consent (autonomy)
  - Beneficent design
    - Usual care *versus* (perhaps) better treatment
    - Usual care *versus* usual care plus something
- Effectiveness of treatment as usual unknown

# Medicaid discussion

Psychiatrist: “What would happen if mental health services were eliminated?”

Economist: “That question is ridiculous. Nobody would be so cruel.”

# Medicaid experiments

“A single courageous state may,  
if its citizens choose,  
serve as a laboratory”

Louis Brandeis, 1932

*New State Ice Company versus Liebmann* (285 U.S. 262, 311)

# Reference

*Medicaid and treatment for people with  
substance abuse problems*

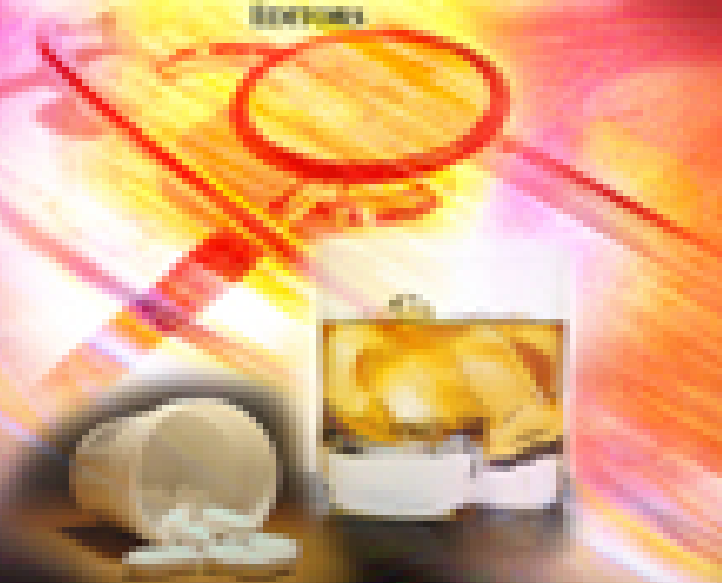
McFarland B, McCarty D, Kovas A

Nova Science Publishers 2010

[www.novapublishers.com](http://www.novapublishers.com)

# MEDICAID AND TREATMENT FOR PEOPLE WITH SUBSTANCE ABUSE PROBLEMS

BENTSON H. McFARLAND  
DENNIS MCCARTY + ANNE E. KOVAS  
Editors



*Health Care Access, Costs  
and Delivery*

2009

# Research question

What happens to Medicaid clients with schizophrenia who lose coverage for mental health services?

# People with schizophrenia and Medicaid

- Many (perhaps most) individuals with schizophrenia depend heavily on Medicaid
- Medicaid finances numerous mental health services
- Medicaid pays for anti-psychotic medications

Campaign for Mental Health Reform. Whither Medicaid? A briefing paper on mental health issues in Medicaid restructuring. Washington, DC, 2005

Mark et al. Psychiatric Services, 54:188, 2003



# Consequences of losing Medicaid

- Loss of coverage for Utah Medicaid clients with schizophrenia during the 1990's
- Chance of hospitalization increased 35%
- Numbers of admissions increased 86%
- Psychiatric hospital days increased 61%

Harman et al. Psychiatric Services 54:999, 2003

# People with schizophrenia and anti-psychotic medication

- Treatment guidelines / evidence-based practices
- Many (perhaps most) people with schizophrenia use anti-psychotic medication

Lehman, Steinwachs et al. Schizophrenia Bulletin 24:1, 1998

Rothbard et al. Schizophrenia Bulletin 29:531, 2003

# Cutbacks in coverage for medication

- New Hampshire Medicaid clients with schizophrenia in 1980's (versus New Jersey Medicaid clients with schizophrenia)
- Reduced drug benefit (prescription numbers) in New Hampshire
- Increased psychiatric hospitalizations

Soumerai Journal of Clinical Psychiatry 64 (Supplement 17):19, 2003

Soumerai et al. New England Journal of Medicine 331:650, 1994

# Oregon Medicaid history

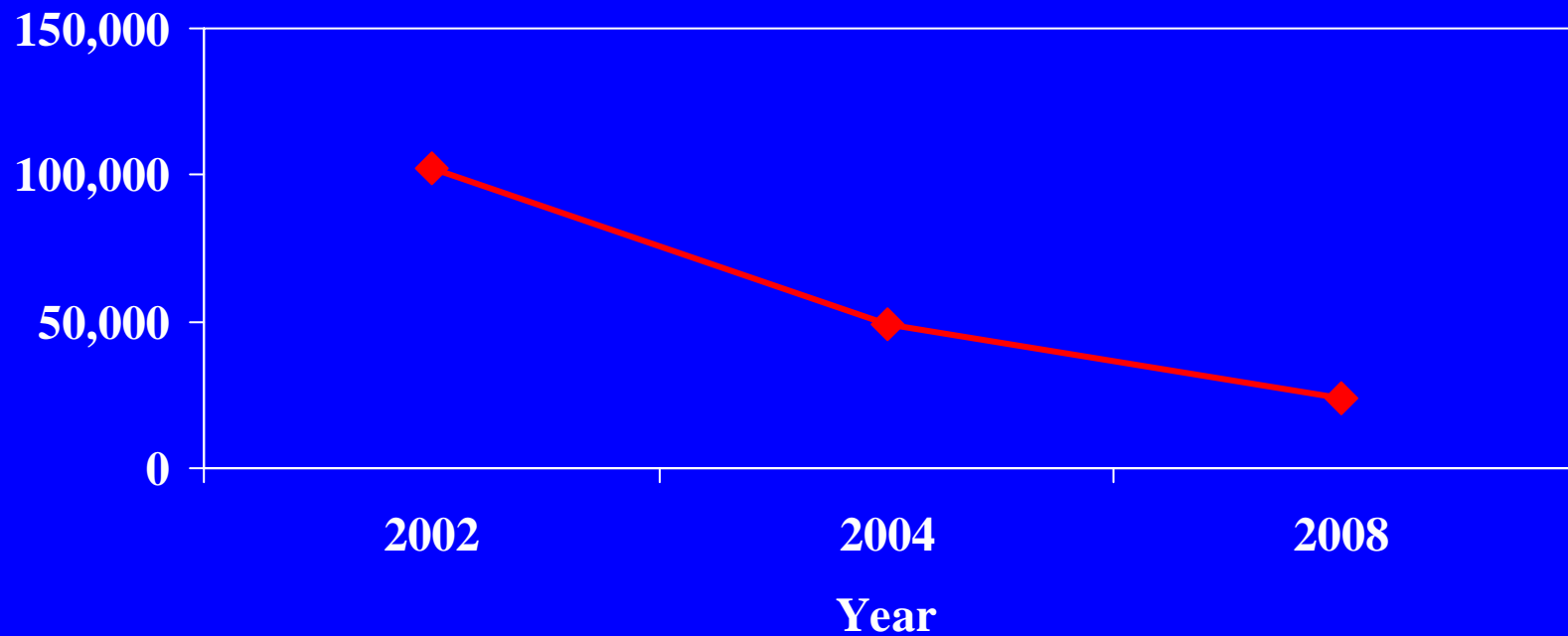
- Oregon Health Plan (“prioritization”) 1990’s
- Eligibility expansion (late 1990’s to early 2000’s)
  - Raised income limitations (e.g., to 100% federal poverty level)
  - Included virtually all people with disability payments
- Oregon Medicaid populations
  - Oregon Health Plan Plus (traditional Medicaid)
  - Oregon Health Plan Standard (expansion population)
- Cutbacks in 2003

# Oregon Medicaid cutbacks (Standard “expansion” population)

- Premiums
- Lock-outs
- Co-payments
- Behavioral health services discontinued then reinstated
- Eligibility (income limits) reduced
- Enrollment closures
- Judicial decisions
- Legislation
- Enrollment lottery

# Oregon Medicaid cutbacks

## Oregon Health Plan Standard (expansion) enrollees



# Research question

What happens to Oregon Medicaid clients with schizophrenia who lose coverage for mental health services in terms of involuntary hospitalization (especially at a state mental hospital) ?

# Psychiatric hospitalizations in Oregon 2004

	<u>Medicaid</u>	<u>non-Medicaid</u>
Voluntary	1632	937
Involuntary civil	2423	3499
Involuntary criminal	236	1197



# Study design

- Oregon Medicaid clients
  - Diagnosis of schizophrenia in 2002
  - Outpatient care and-or atypical anti-psychotic in 2002
  - Over age 18 and under age 65 in 2002 (exclude 5%)
- Medicaid greater than 90% in covered year (with less than 50% in non-covered years)
  - Cohort A: 2002 covered but neither 2003 nor 2004
  - Cohort B: 2002 and 2003 covered but not 2004
  - Cohort C: 2002, 2003, and 2004 covered
- Outcome = involuntary psychiatric hospitalization

# Medicaid cohorts

## Calendar Year

Year 2002

Year 2003

Year 2004

Cohort A (one year coverage) :	+++++	000000000000	000000000000
Cohort B (two years coverage) :	+++++	+++++	000000000000
Cohort C (continuous coverage):	+++++	+++++	+++++

+ = Covered by Oregon Medicaid more than 90% of year

0 = Covered by Oregon Medicaid less than 50% of year

# Demographics

	<u>N</u>	<u>Mean Age</u>	<u>% Women*</u>	<u>% White</u>
Cohort A (one year coverage):	435	43	30%	88%
Cohort B (two years coverage):	187	41	41%	90%
Cohort C (continuous coverage):	3,427	43	43%	88%

\*  $p < .001$  by chi-squared test

# Health insurance coverage

	Medicaid type <u>Standard (expansion)*</u>	Dual <u>Medicare*</u>
Cohort A (one year coverage):	22%	65%
Cohort B (two years coverage):	28%	45%
Cohort C (continuous coverage):	6%	53%

\*  $p < .0001$  by chi-squared test

# Involuntary psychiatric hospitalization during study period

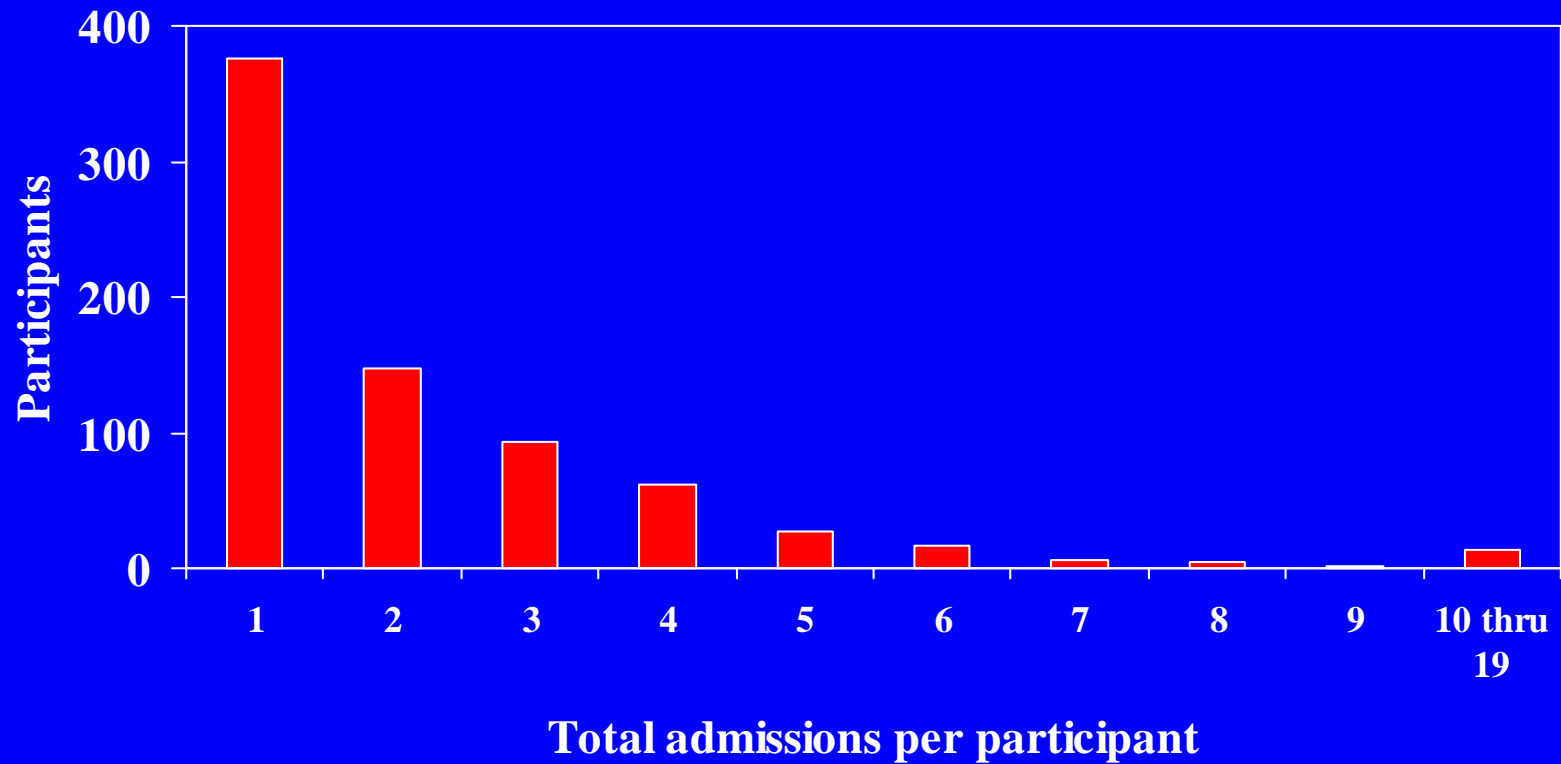
	<u>General hospital</u>	<u>State hospital</u>
Cohort A (one year coverage):	20%	6%
Cohort B (two years coverage):	24%	16%
Cohort C (continuous coverage):	18%	2%

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Medicaid loss within 30 days of hospitalization = 26%

# Analyses - I

- Outcomes (involuntary admissions)
  - General hospital
    - Admissions
    - Days
  - State mental hospital
    - Admissions
    - Days

# Involuntary psychiatric admissions



# Analyses - II

- Propensity scores matching
- Generalized estimating equations
  - Poisson regression
  - Negative binomial regression
- Two-part models
  - Logistic for admitted versus not admitted
  - Poisson or negative binomial for hospital days
- First year as baseline models

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Interaction term: time by cohort by Medicaid type



# Results

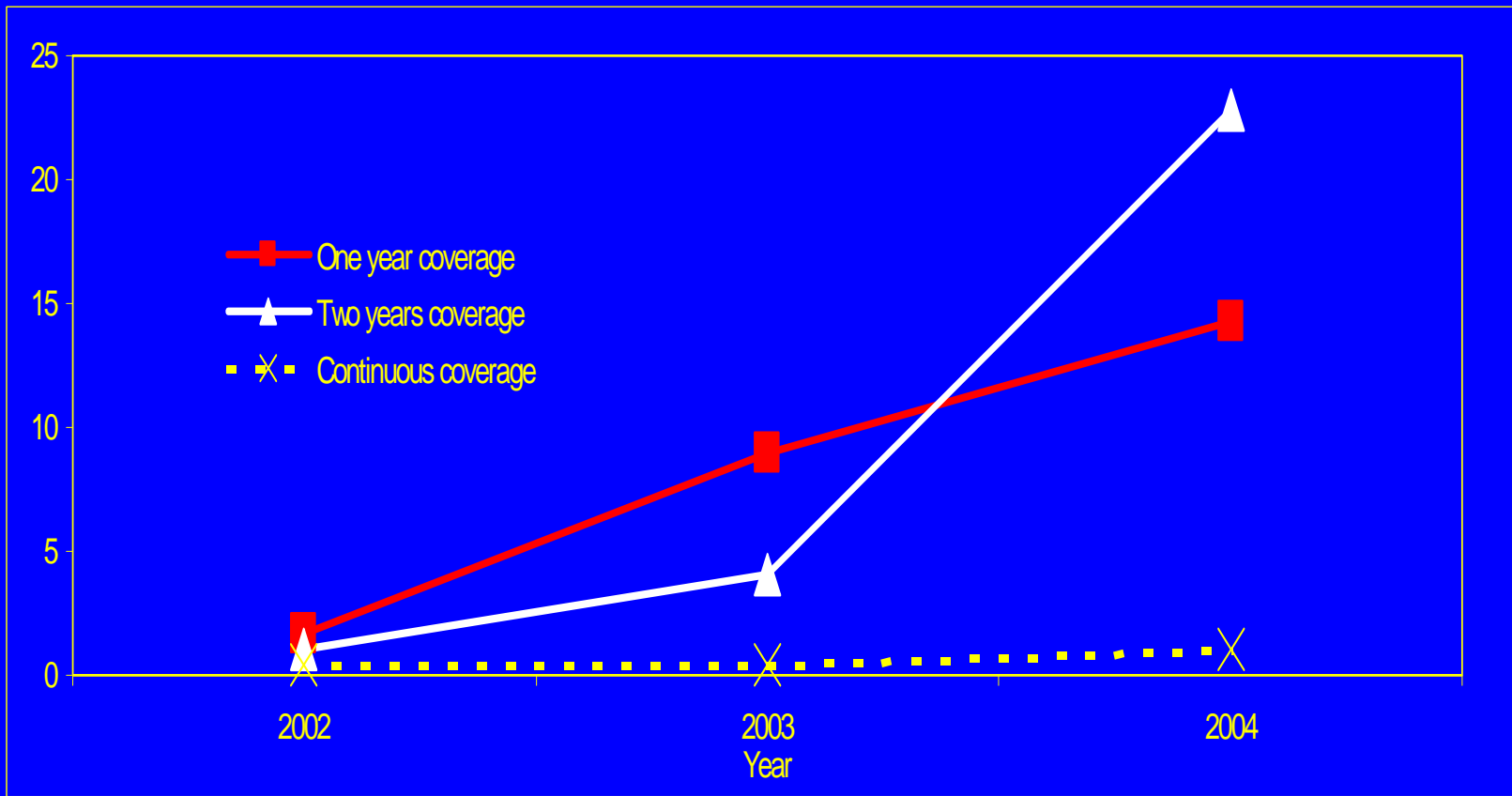
## General hospital

General hospital admissions:	not significant
General hospital psychiatric days:	not significant

(adjusted for age, gender, race, ethnicity, Medicare)

# State hospital days

(mean state mental hospital days per person per year)



# Results

## State mental hospital

- State hospital admissions  $p < .03$
- State hospital days  $p < .003$

(adjusted for age, gender, race, ethnicity, Medicare)

# Conclusions

- Medicaid loss precedes involuntary psychiatric hospitalization
- Medicaid type (and cutbacks) related to
  - Increased state mental hospital admissions
  - More state mental hospital days
- Treatment as usual may be effective

# Summary

Medicaid cutbacks led to increased use of state mental hospital by people with schizophrenia.

# Limitations

- Not randomized
- Outpatient service use unknown

Ongoing research

Oregon Medicaid lottery

# Contact

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