The Impact of Prior Authorization on Buprenorphine Dose, Relapse and Cost of Opioid Addiction Treatment

Evidence from Massachusetts' Medicaid Program

Supported by National Institute of Drug Abuse grant number 5R01DA029741

Center for Health Policy and Research
UMASS MEDICAL SCHOOL
A Commonwealth Medicine Center of Distinction

The UMass Research Team

- Robin Clark, PhD
- Jeff Baxter, MD
- Bruce Barton, PhD
- Gideon Aweh, MS
- Elizabeth O'Connell, MS
- Bill Fisher, PhD

This presentation is solely the responsibility of the authors and
does not necessarily represent the views of the Massachusetts EOHHS or of NIDA.
The authors have no conflicts of interest to disclose.

Buprenorphine/naloxone

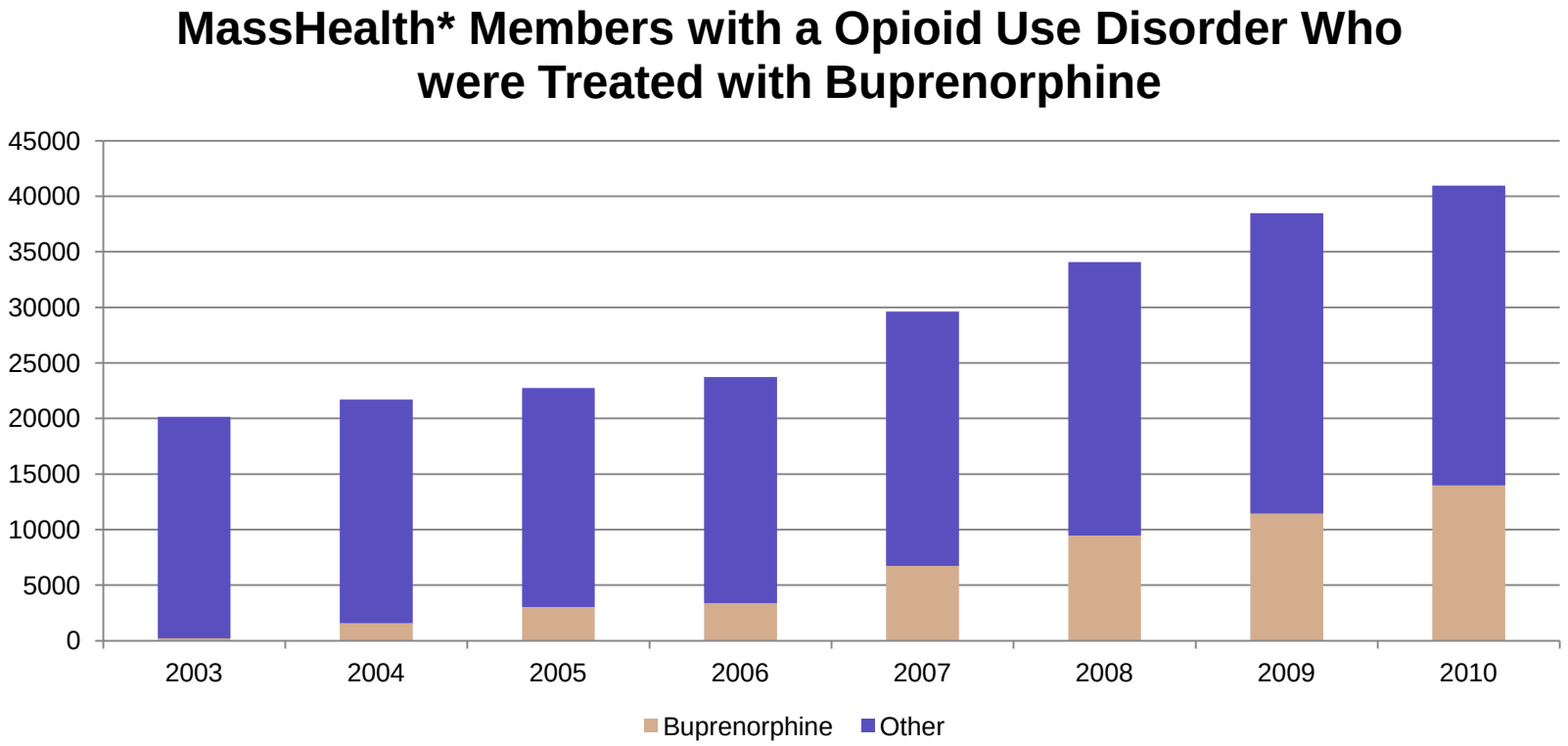
- Introduced in 2003 (Suboxone®)
- First opioid for addiction treatment that can be dispensed in an outpatient setting and taken without direct observation
- Considered safer than methadone
- **Doses > 24 mg not recommended**

Why we are interested in Buprenorphine & Medicaid?

- Medicaid is a key payer for buprenorphine treatment
- Increasing concern about **cost** and **diversion** of buprenorphine
- Most states restrict access through prior authorization requirements

Medicaid.gov
Keeping America Healthy

Buprenorphine treatment in MassHealth has risen steadily



*Massachusetts' Medicaid program

Prior Authorization

- Prescribers must get authorization before a prescription is filled
- Seeks to reduce cost and/or improve safety
- Typically imposed by an insurer
- A favorite tool for Medicaid programs

Unanticipated Effects

- Does not always reduce costs
- May break treatment continuity
- May contribute to relapse

(Law et al, 2008; Abouzaid et al 2010; Lu et al. 2011; Morden 2008)

MassHealth* Prior Authorization for Suboxone®

- Implemented in January 2008
- High doses required more frequent authorization

Daily Dose	Authorization Frequency
> 32 mg	Each prescription
> 24 mg & ≤ 32	Every 90 days
> 16 mg & ≤ 24	Every 180 days
≤ 16 mg	None required

* The Massachusetts Medicaid Program

Research Questions

1. Did high-dose treatment decrease?
2. Did prior authorization affect medication costs and total costs?
3. Did prior authorization affect relapse rates?

Methods

- Medicaid claims January 2007 through December of 2008
- Additional data on other publically funded detoxification treatment
- Limited to those who used Suboxone®
- Three treatment groups: Low dose < 16 mg/day, Medium 16-24 mg, High >24mg

Time series

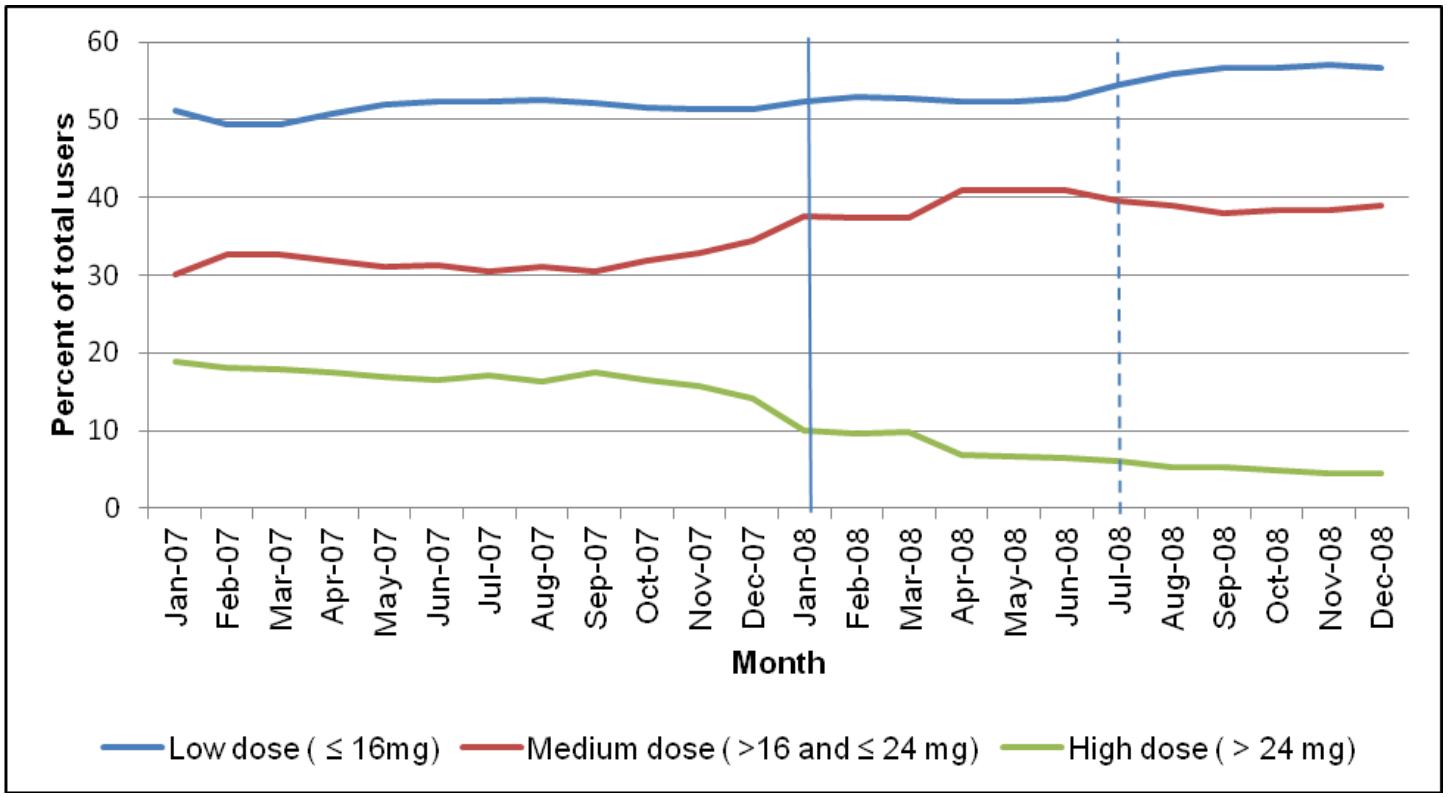
- Population level analysis
  - analyzed claims for all patients using month as the unit of observation
- Individual level multivariable analysis
  - analyzed claims for continuously enrolled patients as the unit of observation (n =2,049)
- Generalized estimating equations for both

Suboxone users in 2007

	Low n = 908	Medium n = 699	High n = 442	Total n= 2,049
Age	**32.9** (9.9)	**33.1** (9.4)	**34.2** (9.7)	**33.2** (9.7)
% Women	**43.1%**	**37.0%**	**33.3%**	**38.9%**
MH conditions	**1.4** (1.5)	**1.3** (1.4)	**1.2** (1.2)	**1.3** (1.4)
Physical conditions	**0.7** (1.0)	**0.6** (0.9)	**0.8** (1.0)	**0.7** (1.0)
Suboxone® $/month	**$164** ($96)	**$284** ($128)	**$362** ($179)	**$248** (151)
Total $/month	**$1,372** ($1,640)	**$1,110** ($1,025)	**$1,102** ($1,185)	**$1,224** ($1,367)

(Standard deviation)

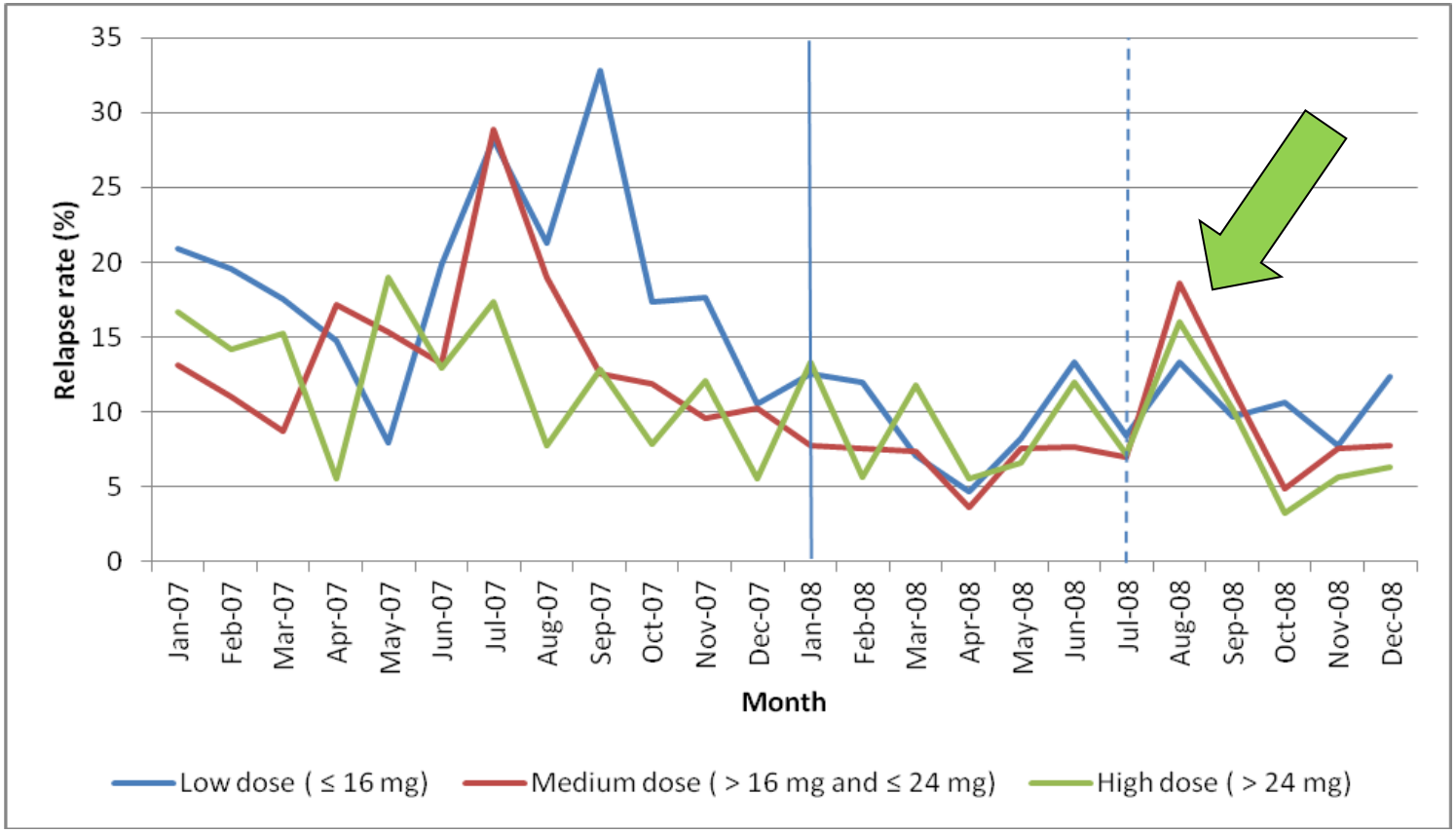
Suboxone® Doses Before and After Prior Authorization



Cost impact

- Suboxone® expenditures decreased in the high dose group
- Increased in other groups
- Net 2008 Suboxone® savings from $131,347 to $492,641
- No savings in overall healthcare costs

Temporary Increase in Relapses



Limitations

- Measures limited to administrative data
- Cannot rule out secular (time) effects

Summary

- The PA effectively lowered high doses
- Modest decrease in Suboxone® cost
- No impact on total cost
- Temporary increase in relapses for medium & high dose groups
- Long-term impact of dose limits needs further study

Why should we care?

- At least 6 states now place lifetime limits on buprenorphine treatment
- Limiting access to medication-assisted treatment can result in more relapses, deaths and higher costs
- Dose related PAs may be a relatively safe way to manage “over prescribing”