

# Changes in Access to Primary Care for Oregon Health Plan Beneficiaries and the Uninsured: The Emergency Department Perspective

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# Changes in Access to Primary Care for OHP Beneficiaries and the Uninsured: The Emergency Department Perspective

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# The context

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- 1990's
  - Oregon Health Plan created
  - Expansion group of ~100,000 Oregonians added to the ~300,000 Oregon Medicaid enrollees
- 2000's
  - Reduction in scope of benefits
  - Premiums
  - Co-payments

# Impact of OHP changes?

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- Ideal study
  - Prospective cohort
  - Primary data collection
  - Follow OHP beneficiaries and uninsured Oregonians for several years
- But
  - Need for quick data

# Opportunity

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- Poor access to primary care →
  - Potentially avoidable ED use
  - Potentially preventable ED use
  - More ED use
- ED claims data rapidly available

# Objective

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- To describe changes in ED use, comparing before vs. after the OHP changes
  - Phase 1: OHSU data
  - Phase 2: representative sample of Oregon EDs
- Uninsured and OHP

# Methods

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- Study subjects

- OHSU ED visits, August 2001 through June 2004

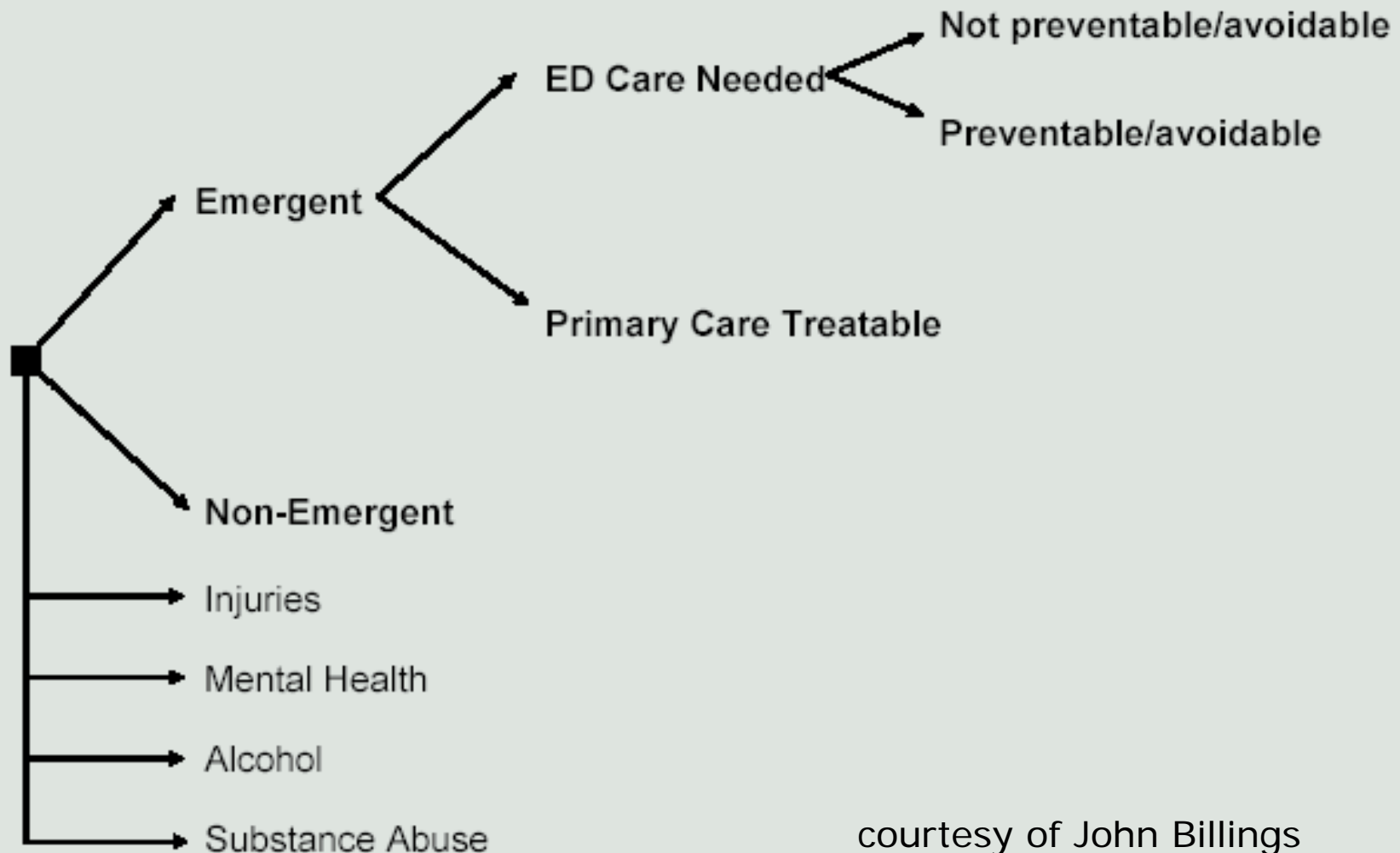
- Variables

- Predictor: before vs after 3/1/2003

- Outcomes

- Overall ED visits
    - Behavioral health
    - Ambulatory care treatable/potentially preventable
      - Billings algorithm

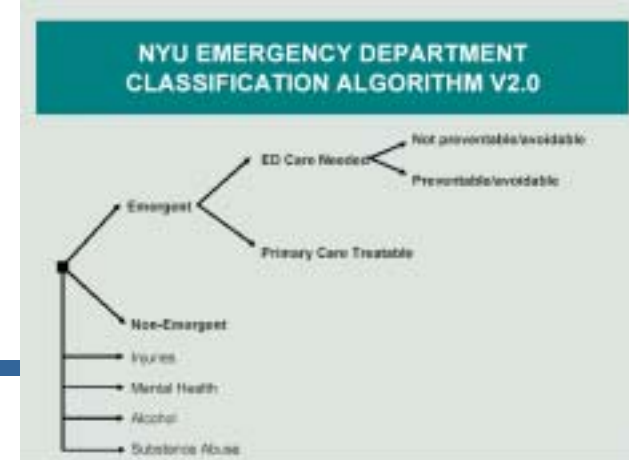
# NYU EMERGENCY DEPARTMENT CLASSIFICATION ALGORITHM V2.0



courtesy of John Billings

# Billings algorithm

- ICD9 789.0: Abdominal Pain
  - 0% non-emergent
  - 67% emergency, primary care treatable
  - 33% emergency, ED needed
- ICD9 038.1: Staphylococcal septicemia\*
  - 0% non-emergent
  - 23% emergency, primary care treatable
  - 77% emergency, ED needed
- ICD9 038.10: Staphylococcal septicemia NOS
  - 0% non-emergent
  - 100% emergency, primary care treatable
  - 0% emergency, ED needed



# Data analysis

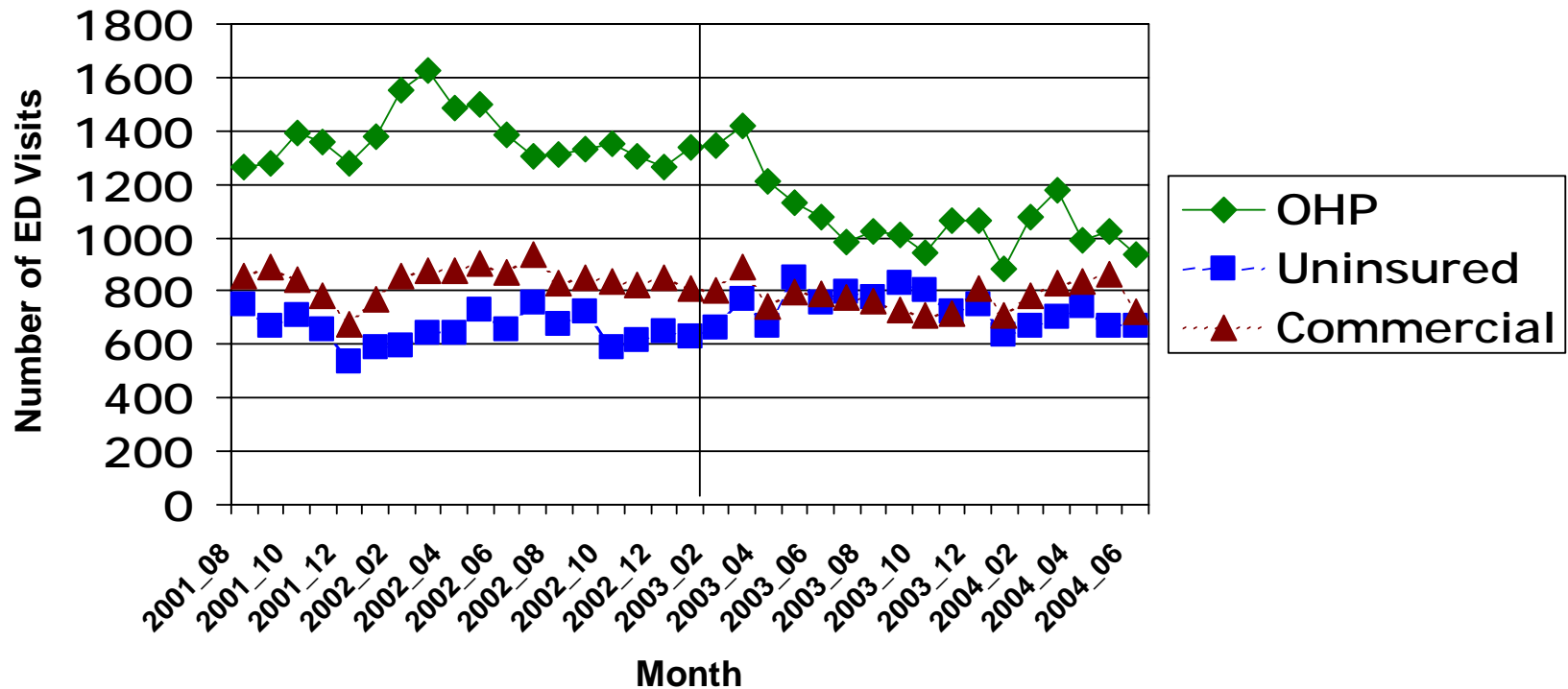
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- Numbers of ED visits
  - Not a rate
- Payer mix
  - % of ED visits in each payer category
- Case mix
  - % of visits in a diagnostic group
- Pseudo-rates
  - Would be rates if any OHP enrollee in the 4-county area would come to OHSU if they went to an ED
  - Changes informative if the % who would come to OHSU did not change during the study period

# Results

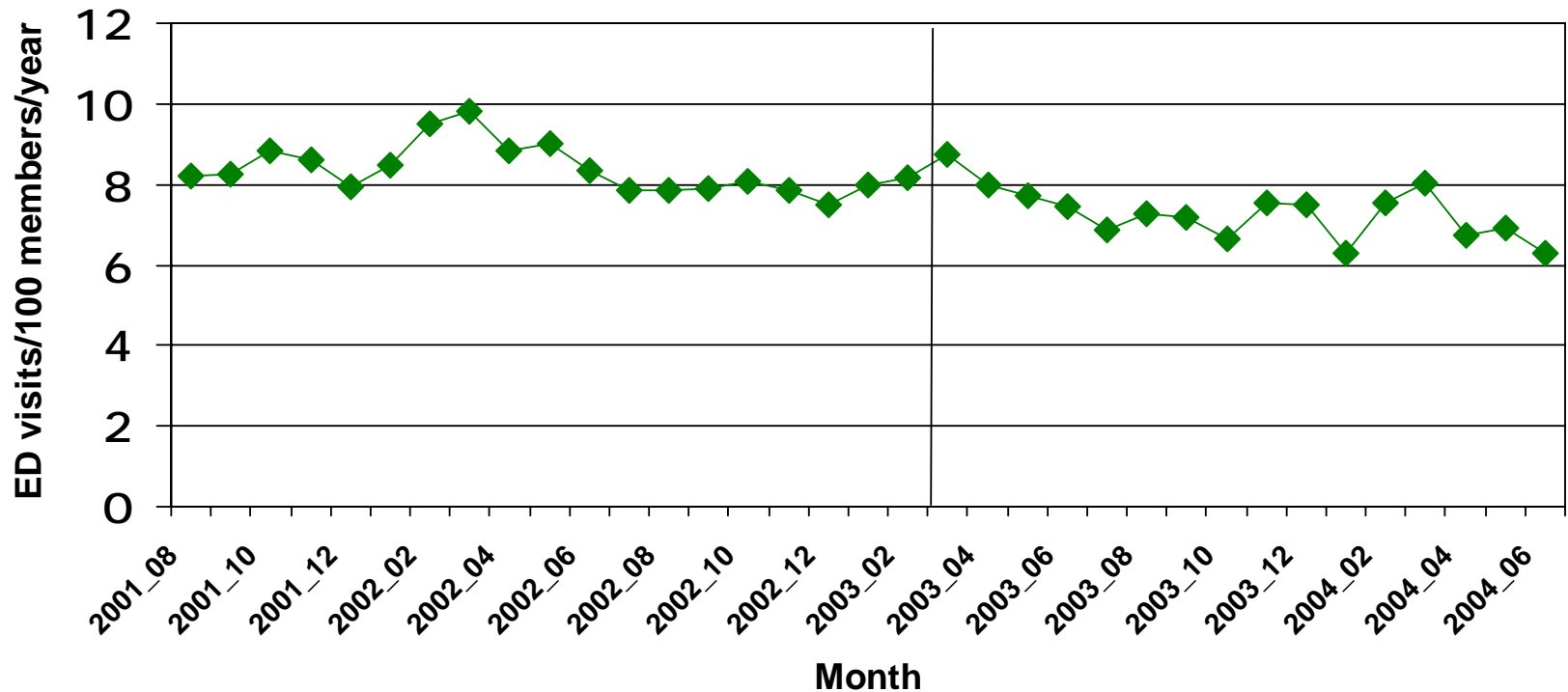
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# Payer mix: % OHP visits fell, % uninsured rose



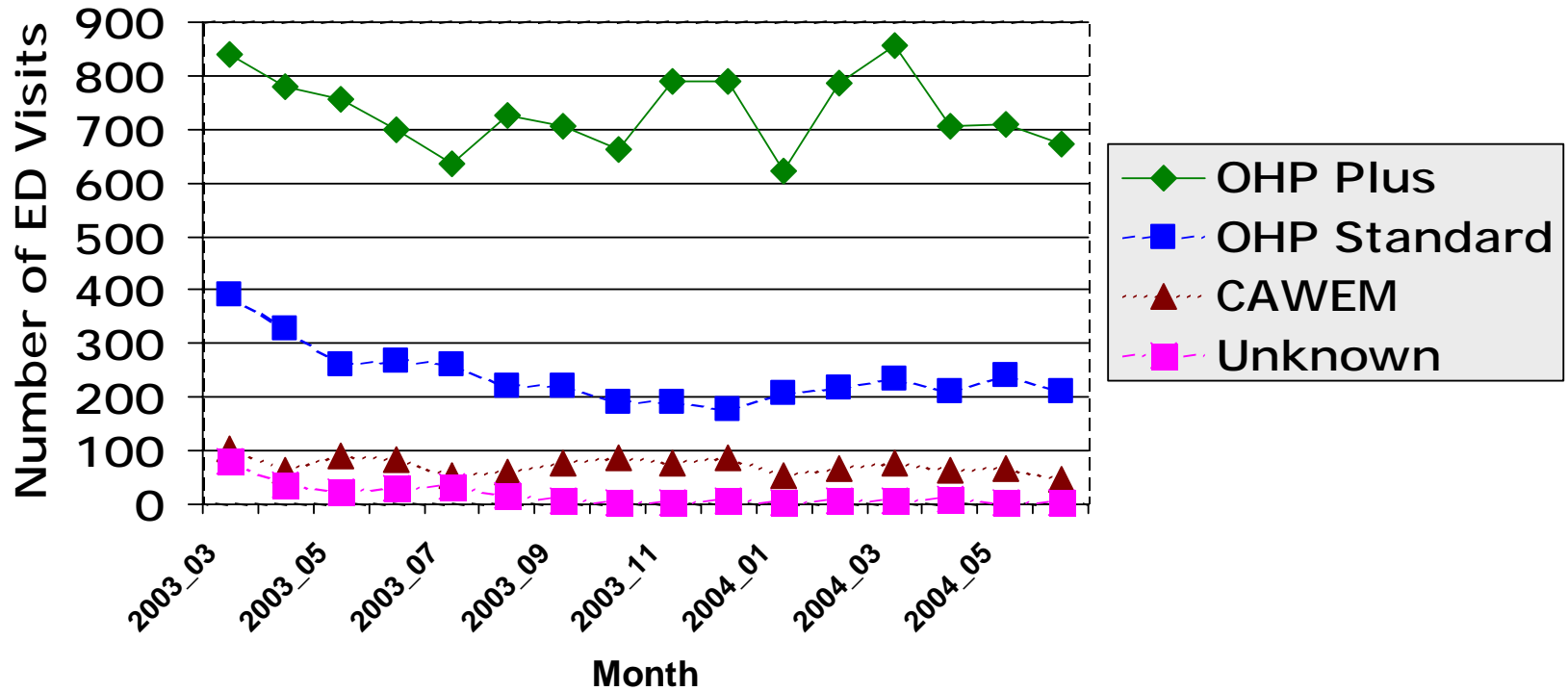
- OHP 38% of visits before 3/1/03 → 32% after (RR 0.84, 95% CI 0.83-0.85)
- Uninsured 18% → 22% (RR 1.22, 1.19-1.24)
- Commercial 23% → 23% (RR 1.01, 0.98-1.03)

# “Rate” of OHP ED visits fell

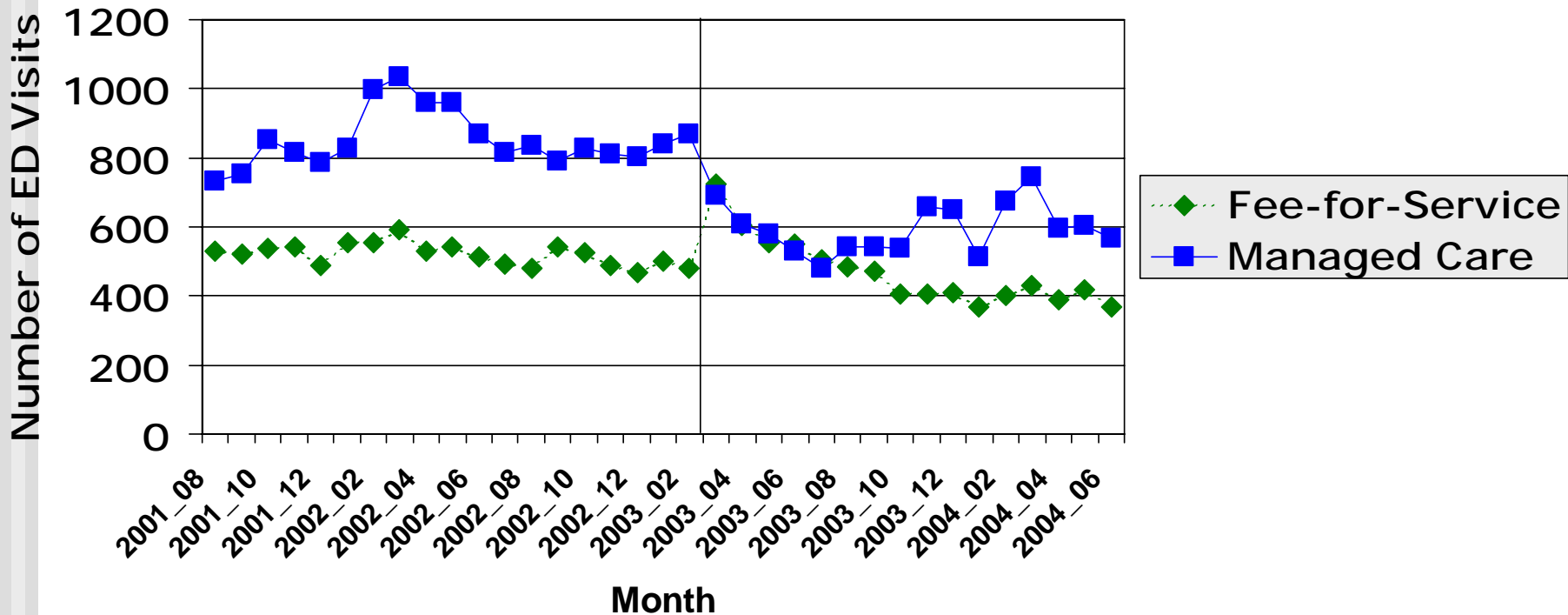


- Rate before 8.4 visits/100 members/year  
→ 7.3 after

# Payer mix: % OHP Standard visits fell



# Payer mix: % Fee-for-Service increased for OHP



■ FFS 38% → 44% (RR 1.16, 1.13-1.19)

# Behavioral health: data limitations

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- Alcohol-related ED visits
  - Mean 57/month
- Drug-related ED visits
  - Mean 15/month
- Other psychiatric ED visits
  - Mean 159/month

# Behavioral health ED visits: payer-mix changes

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## ■ Alcohol

- OHP 46% of visits before → 32% after (RR 0.69, 0.61-0.78)
- Uninsured 26% of visits before → 37% after (RR 1.41, 1.21-1.65)

## ■ Drug

- OHP 55% of visits before → 36% after (RR 0.66, 0.53-0.81)
- Uninsured 27% of visits before → 45% after (RR 1.70, 1.28-2.24)

## ■ Other psychiatric

- OHP 41% of visits before → 31% after (RR 0.76, 0.70-0.82)
- Uninsured 16% of visits before → 23% after (RR 1.48, 1.30-1.67)

# Behavioral health ED visits: case-mix changes

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## ■ Alcohol

- 1.9% of OHP visits before → 1.7% after (RR 0.90, 0.77-1.06)
- 2.2% of uninsured before → 2.8% after (RR 1.29, 1.08-1.54)

## ■ Drug

- 0.6% of OHP visits before → 0.5% after (RR 0.85, 0.63-1.13)
- 0.6% of uninsured before → 0.9% after (RR 1.52, 1.08-2.13)

## ■ Other psychiatric

- 4.7% of OHP visits before → 4.7% after (RR 0.99, 0.89-1.09)
- 3.8% of uninsured before → 5.1% after (RR 1.33, 1.16-1.53)

# Behavioral health visits: Interpretation

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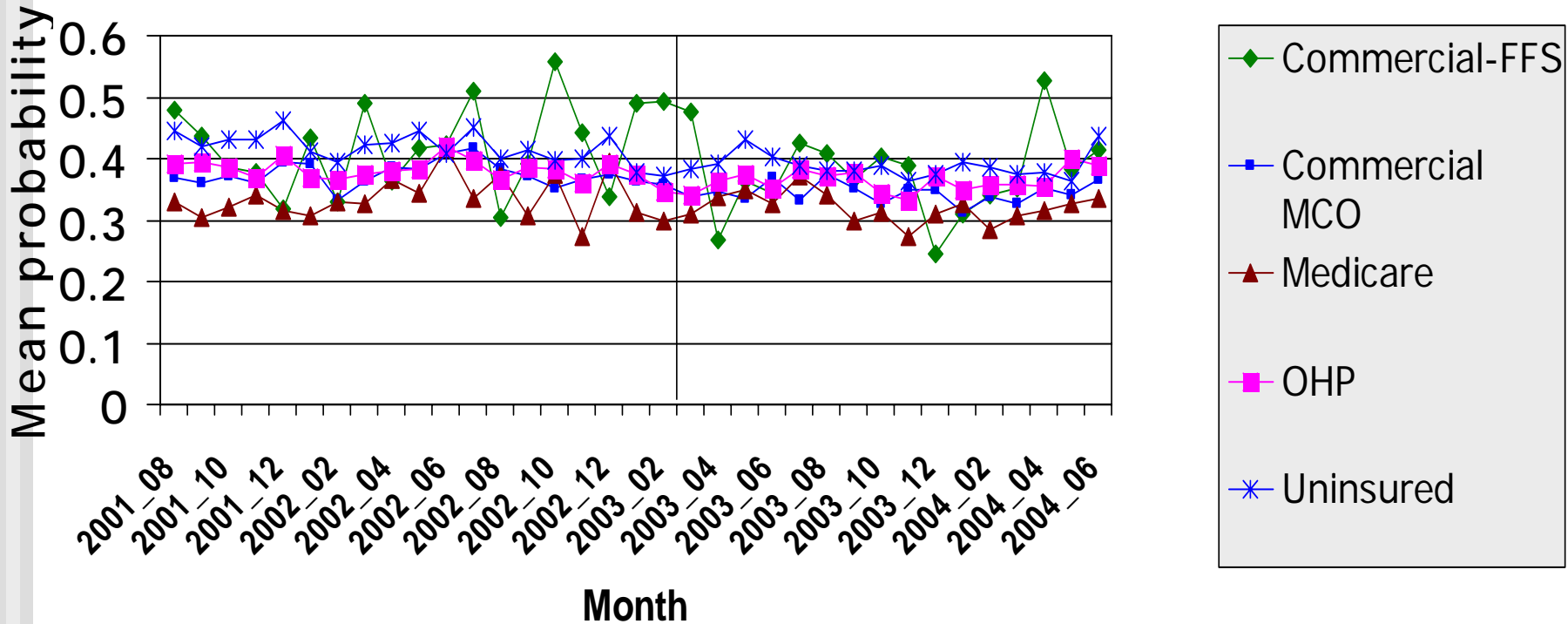
- Payer mix
  - Fall in % of visits covered by OHP
  - Rise in % of visits by uninsured
- Case mix
  - Little change in OHP case-mix
    - Given the drop in number of OHP visits → reduced number of OHP-sponsored behavioral health visits
  - Among ED visits by uninsured patients, rise in % drug-, alcohol-, and psychiatric-related
    - Have OHP enrollees with behavioral health conditions dropped out of OHP and substituted ED for outpatient treatment?

# Billings categories by payer

	Commercial	OHP	Uninsured
Non-emergency	.36	.37	.40
Emergency PC treatable	.35	.37	.36
ED needed, potentially avoidable	.09	.09	.09
ED needed, not avoidable	.19	.16	.15

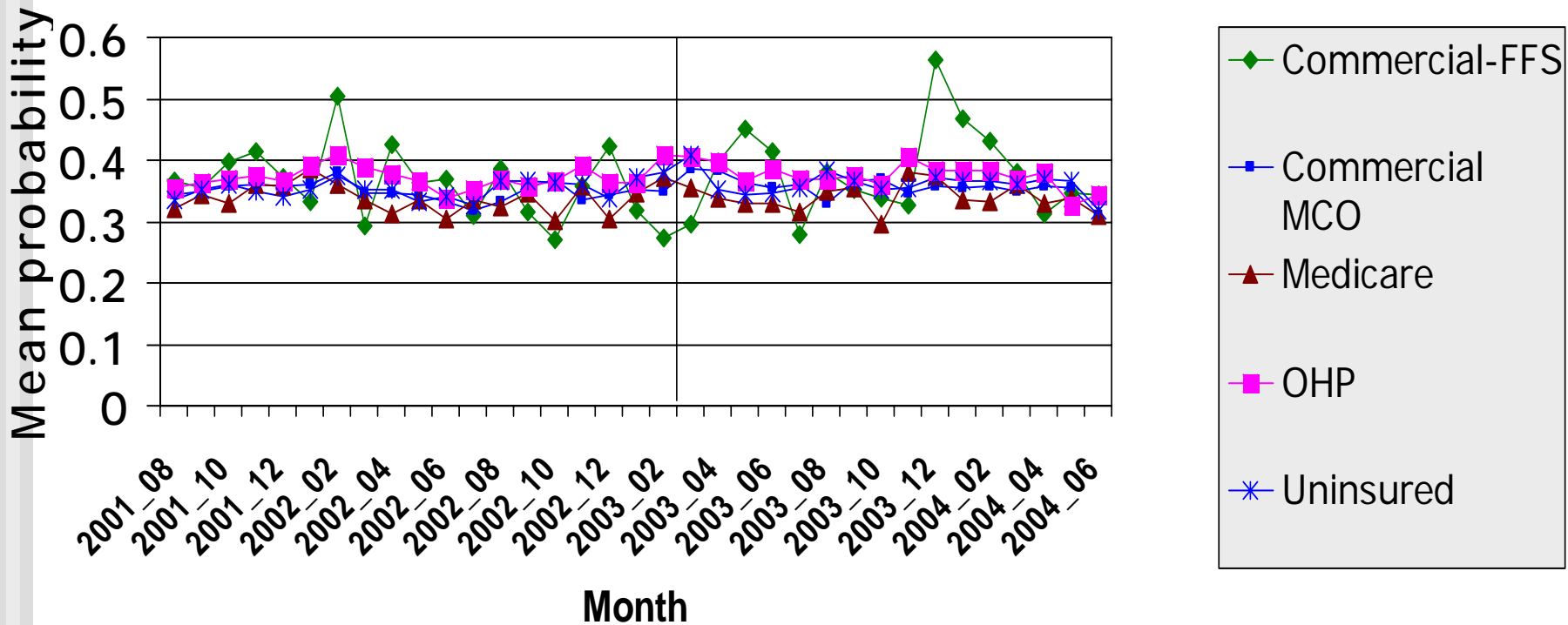
# Ambulatory care sensitive ED visits

## Non-Emergency



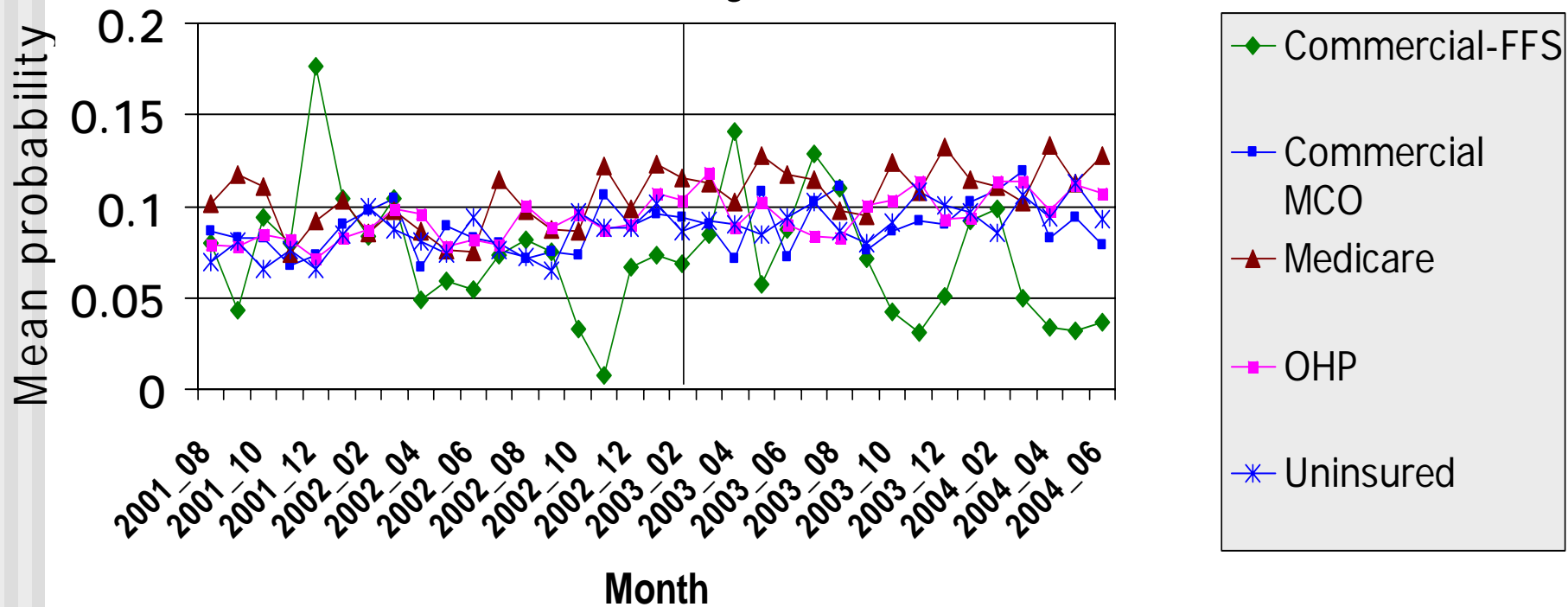
# Ambulatory care sensitive ED visits

## Emergency/Primary Care Treatable



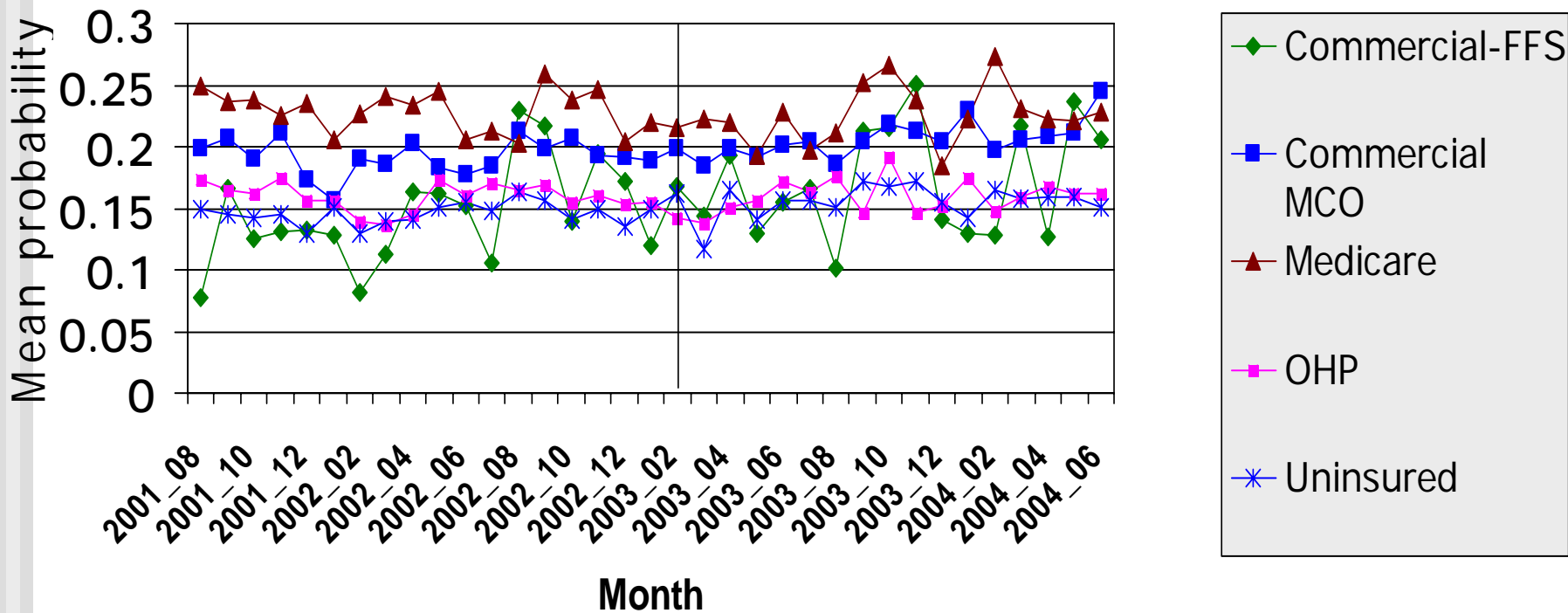
# Ambulatory care sensitive ED visits

Emergency, ED Needed  
Potentially Preventable



# Ambulatory care sensitive ED visits

Emergency, ED Needed  
Not Preventable or Avoidable



# Summary:

## Overall ED visits

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- Drop in OHP visits
  - Payer mix
  - Drop in “rate” puzzling
    - Impact of co-payment?
  - Rise in uninsured visits
  - Payer mix

# Summary:

## Behavioral health ED visits

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- Drop in OHP visits; rise in uninsured
- Have OHP enrollees with behavioral health conditions dropped out of OHP and substituted ED for outpatient treatment?
- Limited by under-reporting of drug and alcohol-related diagnoses in billing data

# Summary: Ambulatory care sensitive ED visits

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- ? Validity of classification system?
- If % emergencies doesn't rise and # of visits falls, are patients with emergency conditions failing to seek care?

# Limitations

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- Counts not rates
- One ED
- Under-reporting of drug and alcohol diagnoses

# Conclusion

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- Probably not good news
  - Drop in OHP ED use
    - As % of all ED visits
    - As "rate"
  - Increased ED use by uninsured suggests increased barriers to care
    - Especially for behavioral health problems
  - Worsened payer mix will force increased cost-shifting

# Next steps

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- Study more EDs
- Historical cohort study of OHP enrollees
  - Case-mix adjusted ED utilization rates