

# The Impact of Losing Dental Benefits On Low Income Adults

Results from an Ongoing Prospective Cohort Study

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# Summary of Changes to OHP Standard

## Early 2003

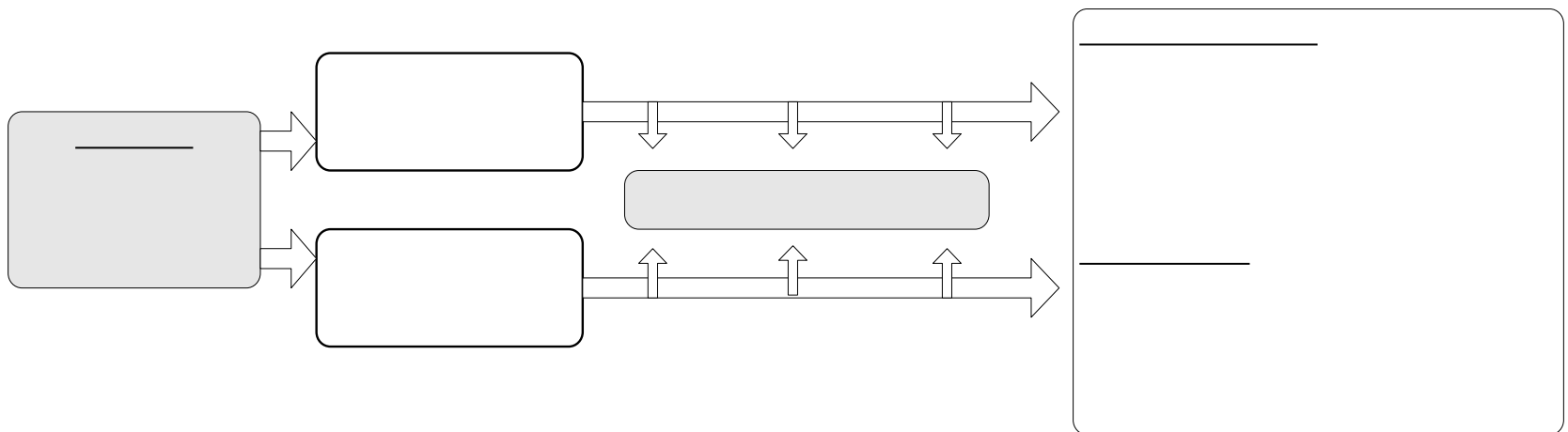
- Premium changes - \$6-\$20 per month based on income.
- Expansion of co-pays - office visits, labs, ED, prescriptions, hospitalization; ranging from \$5 to \$250.
- Non-payment of premium results in 6 month “lock-out” from OHP.
- **Eliminated coverage for dental**, vision, outpatient mental health, substance abuse, durable medical equipment.

## Summer 2004

- In response to a legal ruling, copays dropped for Standard members.
- Outpatient Mental health and chemical dependency benefits restored.

# Design of the OHP Cohort Study

Longitudinal cohort study designed to assess impacts of program redesign by following a group of people for three years after the initial changes.



## Key Questions

1. What effect did elimination of dental benefits have on:
  - Unmet dental needs
  - Utilization of preventive services
2. Were vulnerable populations disproportionately affected by benefit elimination?
3. Did elimination of dental benefits impact rates of emergency department utilization?

# Methods

- Population: Adults > 18 years of age enrolled in OHP Plus and OHP Standard on Feb 15, 2003 for at least 30 days.
- Sampling:
  - Stratified probability sample of 10,597 OHP Plus and OHP Standard members.
  - 8,260 eligible for panel recruitment.
  - Response rates = 34% (n=2783) / 72% (n=2003) / 66% (n=1821).
  - Responders were demographically similar to non-responders.
  - Post stratification weighting to age, sex, race, eligibility group.
- Analysis:
  - Cross-sectional analysis of 779 continuously enrolled members.
  - Propensity score adjusted comparison of OHP Plus (retained benefit) with OHP Standard (lost benefit).
  - Multivariate analyses control for (age, gender, education, employment status), chronic illness, depression, income, SF-12 composite scores

## Methods Cont.

### Survey Items in Waves 2 and 3

Was there a time in the last 6 months when you needed dental care but did NOT get it?

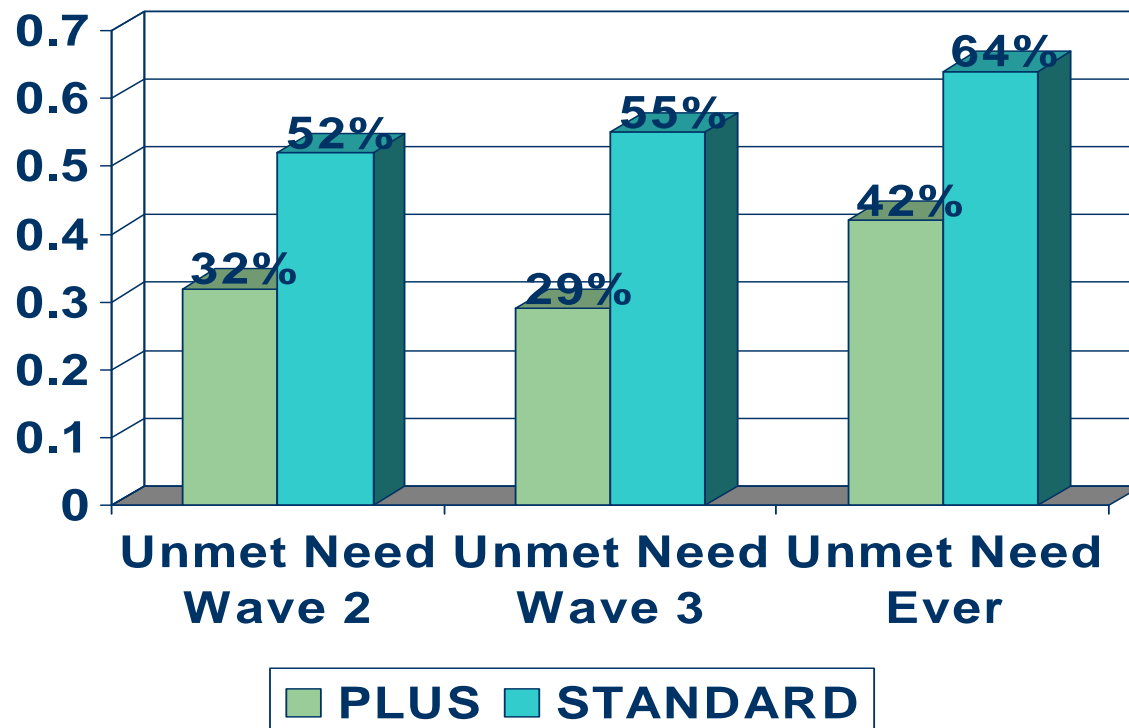
On average, how often do you receive a dental check-up?

- Twice a year or more
- Once a year
- Less than once a year
- I never go to the dentist
- Don't know

In the last 6 months, how many times did you go to the emergency room to get care for yourself?

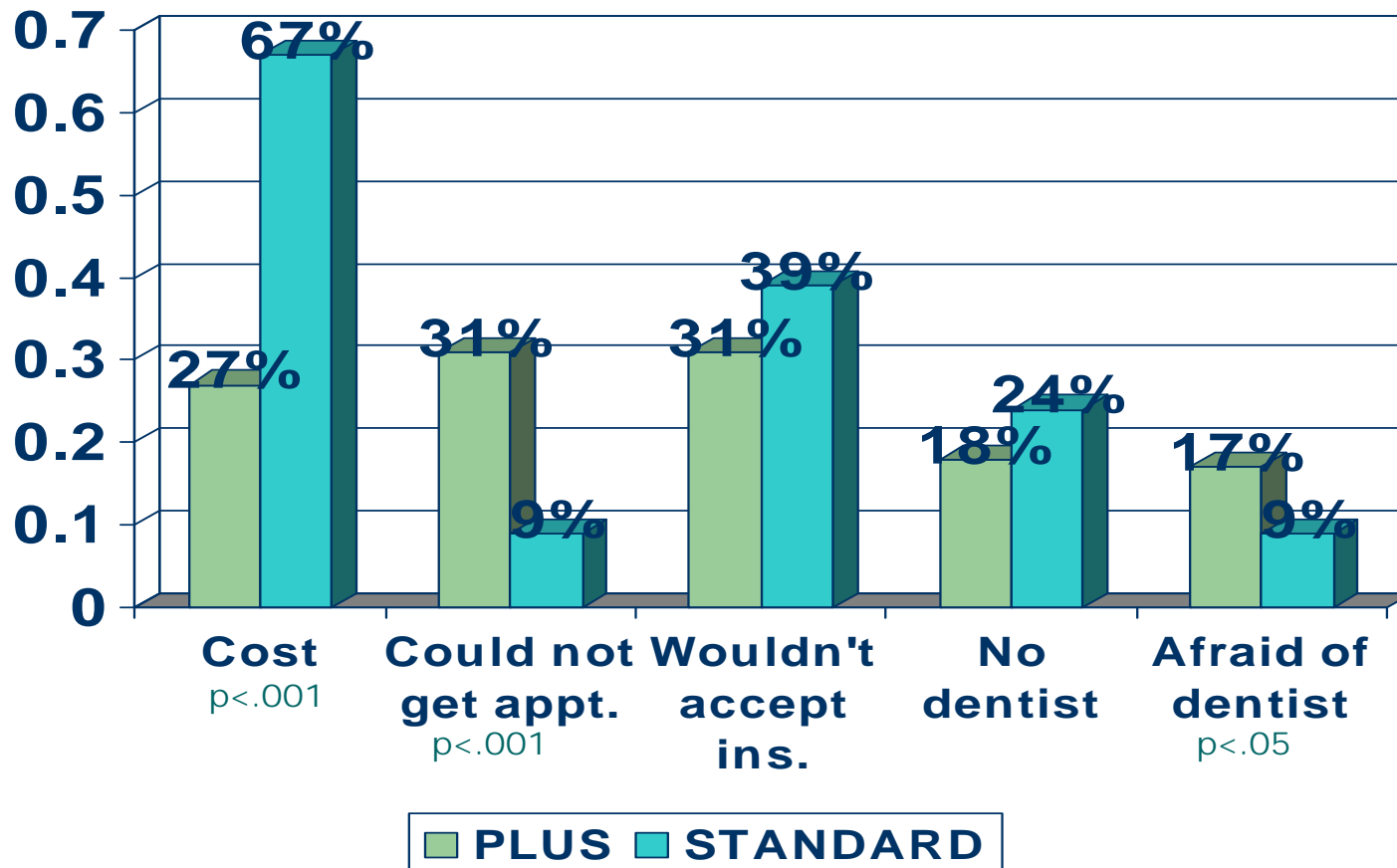
# OHP Standard was significantly more likely to report unmet dental needs

Percent Report Unmet Dental Needs



All differences significant.  $P < .05$  two-tailed chi square

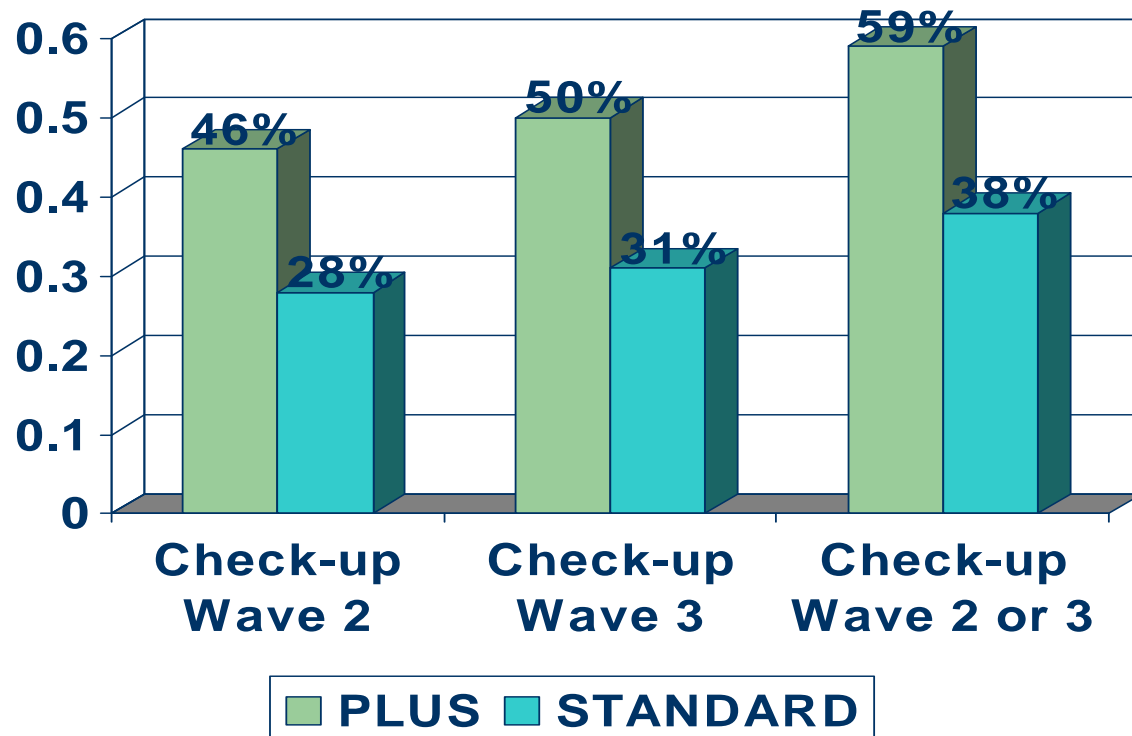
OHP Standard was significantly more likely to report cost as a reason for unmet need





# OHP Standard was significantly less likely to report dental check-up

Percent Reporting Dental Checkup At Least Annually



All differences significant.  $P < .05$  two-tailed chi square

Even after adjusting for demographic and health status differences....

Adjusted Odds of Unmet Need and Annual Checkups

	Experienced Unmet Dental Need During Study Period	Reported Getting Checkups At Least Annually
	Odds Ratio (95% CI)	Odds Ratio (95% CI)
OHP Standard (no dental benefits) ( <i>OHP Plus is referent</i> )	2.863* (1.746-4.694)	.340 * (.209-.555)

## Lack of dental benefits disproportionately affected vulnerable populations

### Adjusted Odds of Unmet Dental Needs for Vulnerable Populations

	<i>Entire Panel</i>	<i>OHP Standard Vulnerable Subpopulations</i>		
		Those with Poor Health	Those with Depression	Those with Incomes 25% FPL or Less
	Odds Ratio (95% CI)	Odds Ratio (95% CI)	Odds Ratio (95% CI)	Odds Ratio (95% CI)
OHP Standard ( <i>OHP Plus is referent</i> )	2.863 * (1.746-4.694)	4.278 * (1.931-9.477)	3.243 * (1.573-6.686)	3.171 * (1.456-6.903)

# Lack of dental benefits may be associated with increased risk of emergency room use

## Adjusted Odds of Self-Reported Emergency Room Use

	Had At Least One ED Visit During Wave 2 or 3
	Odds Ratio (95% CI)
OHP Standard ( <i>OHP Plus is referent</i> )	1.260 (.861-1.843)
Had an Unmet Dental Need	1.600 * (1.118-2.290)
Unmet General Health Need	1.490 (.920-2.414)
Used ED During Wave One	2.811 * (1.949-4.052)

# Conclusions

- After controlling for other relevant factors: loss of OHP dental coverage appears to have negatively affected OHP Standard population
  - increased risk of unmet dental needs;
  - decreased likelihood of annual checkup;
  - Increased risk of emergency department use.
- Prior research indicates 57% of OHP expansion population had a dental visit in 1998.
- Prior research conducted in Maryland indicated 20% increase in dental related ED visits following 1993 elimination of Medicaid dental benefit.

# Limitations

- Lack of baseline data makes it difficult to assess dental access prior to elimination of dental benefit.
  - Prior research suggests that dental visits were much higher for expansion population.
- Self-reported survey data for dental needs and use of care-no clinical measures of dental needs.
- ED measure does not distinguish between dental and other reasons.
- Differences in study populations NOT likely to account for varying levels of unmet dental needs, preventive care, and ED use.

# Policy Implications

- Dental coverage matters – particularly for chronically ill and those with the lowest incomes.
- Data from Oregon and Maryland suggest that cost savings associated with reduced dental benefits may be partially offset by higher ED costs.
- Why is oral health an optional benefit?
- Integration of dental and primary care?

# References

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- Mitchell JB, et al. Impact of the Oregon Health Plan on access and satisfaction of adults with low income. Health Services Research 2002;37(1):19-39.
- Cohen LA, et al. Does the elimination of Medicaid dental reimbursement affect the frequency of emergency department dental visits?. Journal of the American Dental Association 1996;127:605-609.



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