# Evaluating the Impact of Medicaid Managed Care on Preventive Health Care Use by Children and Adolescents

June 24, 2006 Todd Eberly, Ph.D.

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## Implications of Managed Care

- Control escalating costs
  - Medicaid had become largest single budget item
- Would cost controls hurt vulnerable populations?
  - Restricted provider networks
  - Utilization review
  - Specialist referrals
  - Minority recipients may have to "compete" with white recipients for services

## Managed Care Concerns

- Concern is Understandable
- Largest insurer in the nation
  - Medicaid covers 1 in 7 Americans
  - Disproportionately covers racial/ethnic minorities
  - Disproportionately covers children
    - 27% of all children
    - 45% of black children
    - 40% of Hispanic children
    - 18% of white children



## Managed Care Benefits

- Managed Care may alleviate disparities
- Lack of a usual source of care is a frequently cited source of disparities (Politzer et al. 2001; Corbie-Smith et al. 2002)
  - MC to offer network of providers
    - Offer a Medical Home
    - MMC recipients more likely to have a USoC (Mitchell and Gaskin 2004)
- State's could employ "value-based purchasing"
  - Establish quality standards
    - Provider access
    - Care content



#### Medicaid MC in Maryland

- Medicaid enrollment doubled between 1989 and 1994
  - Covered quarter of children
  - Became largest expenditure
- Mandatory MC in 1998
  - 7 MCOs
  - Cover nearly 80% of Medicaid recipients\*
- Currently 600,000 recipients
  - 30% of state's children



#### Prior Research

- Contradictory findings
  - Racial and ethnic minorities negatively affected by MC (Tai-Seale et al 2001; Schneider, Zaslavsky and Epstein 2002)
  - Disparities alleviated under MC (Leiu et al 2002)
  - Medicaid MC had a positive impact on overall service use when compared to FFS (Garret, Davidoff and Yemane 2003, Berman, Almon and Todd 2005)
- Prior research hampered but limitations
  - Limited demographic data
  - Surveys rather than claims/encounter data



## Purpose/Objective

Explore effects of transition to MC on absolute and relative preventive care use for children and adolescents in racial and ethnic minority groups relative to white peers



## Design and Methodology

- Pool multiple years of claims and encounter data
  - Study years 1997, 2001 and 2004
- Bivariate analyses establish patterns of preventive care use across populations and over time
- Difference-in-difference (DD) approach in a multivariate context
  - Estimates the differential effects of MC transition on racial and ethnic groups,
  - Controlled for child, family, area, and program characteristics to calculate the probabilities of service use under MMC and FFS



#### **Data Sources**

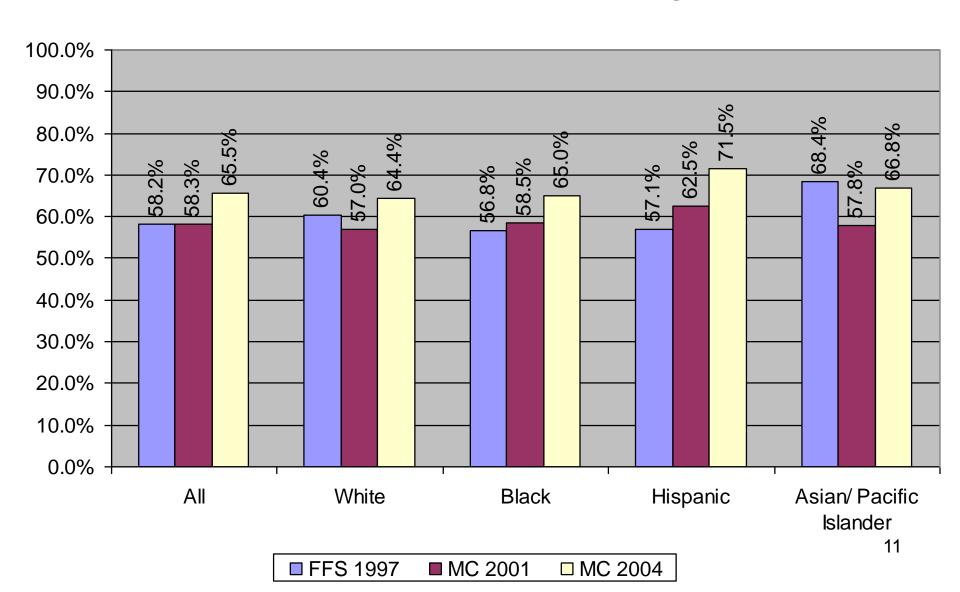
- Maryland's Medicaid Management Information System (MMIS)
- The Maryland Department of Human Resources (DHR) social services dataset
- The study population included enrollees in Maryland Medicaid in 1997 (last year of FFS), 2001 and 2004
- Approximately 123,000 children and 156,00 adolescents

### Dependent Variables

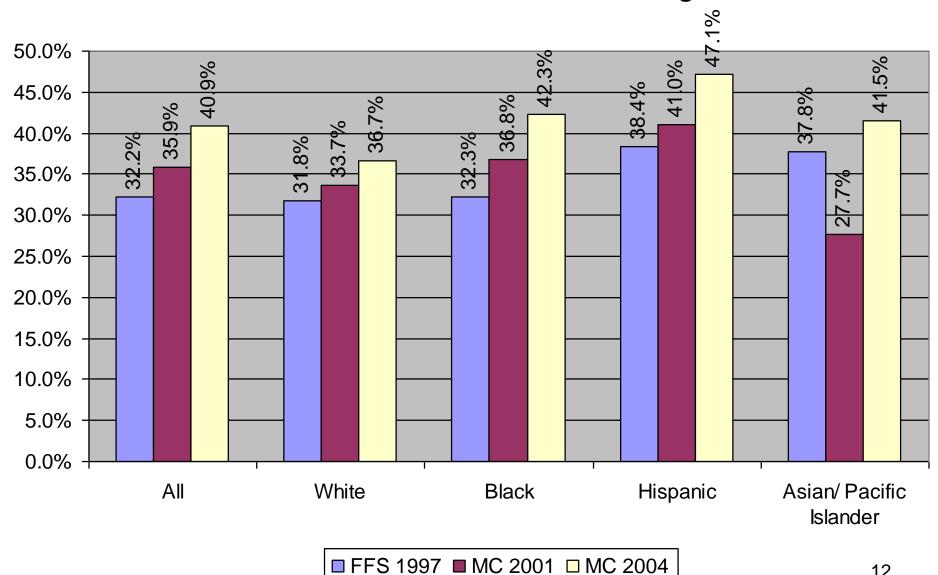
- Measures selected from National Committee on Quality Assurance (NCQA) Health Plan Employer Data and Information Set (HEDIS)
  - Well child visits (ages 3-6)
  - Adolescent well care visits (ages 12-21)
- Determined based on presence of specified procedure codes in claims or encounter data



## Mean Access Rates - FFS vs. MC Well Child Visits for Children 3 through 6



#### Mean Access Rates - FFS vs. MC Well Care Visits for Adolescents 12 through 21

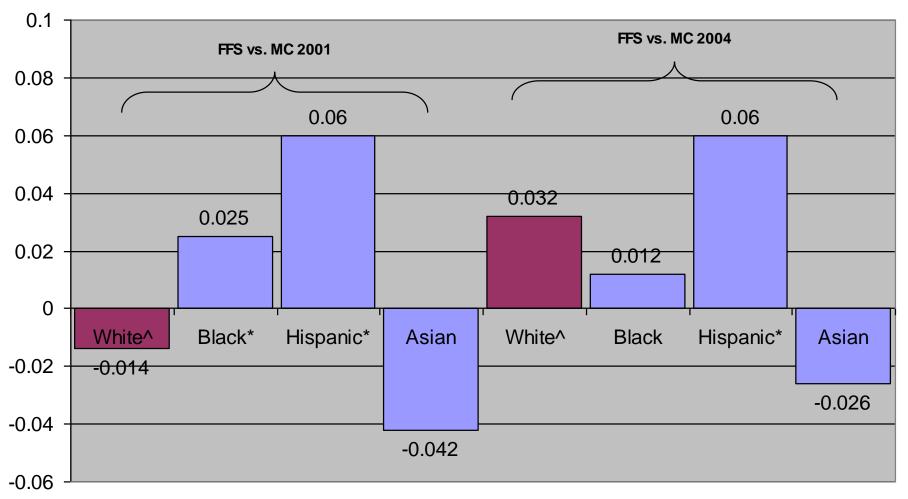


## Population Change - Children

- Little change to Medicaid eligibility during study years
- SCHIP implemented
  - May have "spillover" effects on Medicaid
- Child Population
  - Share of white children declined slightly
  - Share of Hispanic children grew from 4% to 11%
  - Family incomes slightly higher
- Changes were similar for adolescents
  - Slightly healthier



#### Effects of Medicaid Managed Care vs. FFS White Children and Differential Effects for Black and Hispanic Chidren



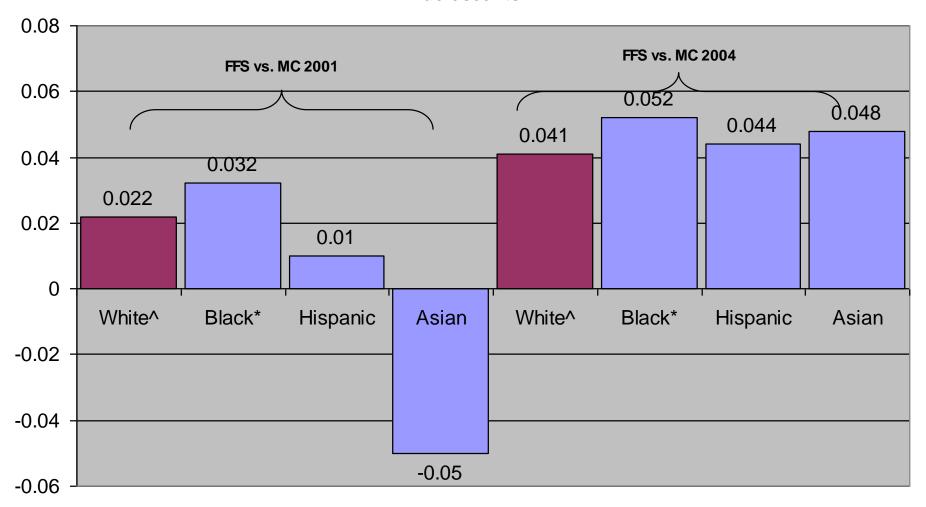
<sup>^</sup> Denotes significant difference from FFS at .05 level.

Individual Characteristics included age, gender, income, employment (by parent), primary language, and health status.

Programmatic Characteristics included residence, local provider capacity, prior MC experience, and length of enrollment.

<sup>\*</sup> Denotes significant difference from white children at .05 level.

## Effects of Medicaid Managed Care vs. FFS White Adolescents and Differential Effects for Black, Hispanic and Asian Adolescents



<sup>^</sup> Denotes significant difference from FFS at .05 level.

<sup>\*</sup> Denotes significant difference from white children at .05 level.

#### Discussion

- Prior studies have shown disparate levels of health care service use by racial and ethnic minorities and differentially negative effects of Medicaid MC on racial minorities relative to white peers
- Present study finds MMC had a positive impact on the receipt of primary preventive care by black, white and Hispanic children and adolescents
- Increases in service use were greater for black and Hispanic children and black adolescents as compared to white peers



#### Discussion

- Structure of MC may explain differential gains
  - MC provides usual source of care
- MC enables state agencies to oversee quality
  - State requires initial health assessment
  - Value based purchasing
  - Quality monitoring in MC "offers the potential to help eliminate disparities in healthcare" (Smedley et al. 2002)

#### Conclusion

- Findings suggest the transition to MMC has not resulted in decreased use of preventive services
- Has not had a disparately negative effect on service use by racial and ethnic minorities
- Further study is required to determine whether improvements in the receipt of preventive services are similarly observable in health outcomes or in the receipt of specialty services



#### Limitations

- Maryland-specific
  - May not be representative of Medicaid managed care other states
- No conclusions about the quality or appropriateness of the services



#### Questions

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