

Birth Defects in Oregon Foster Children

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Background

- Foster children make up a small proportion of all Medicaid recipients
- Yet the cost of their health and mental health care through Medicaid is disproportionately high (Geen, Sommers, and Cohen, 2005)
- Could a part of the higher cost be due to a higher prevalence of birth defects in foster children than in Medicaid children overall?

Purpose

- To examine the prevalence of birth defects in Oregon foster children ages 0 to 4 through analysis of Medicaid/SCHIP data.

Methods

Population: 136,000 children ages 0 to 4

- Born during 2001-2005
- Receiving Medicaid or SCHIP sometime during 2001-2005

**** Subpopulation of above: 8400 "foster children"**

- » in foster care or
- » adopted from foster care and receiving adoption assistance
- » 99% of all foster children, since almost all receive Medicaid

Examined Medicaid/SCHIP claims for these children for 2001-2005. Selected children with ICD-9 code diagnoses indicating:

- Any of 44 birth defect categories (109 ICD-9 codes) included in case definition of National Birth Defects Prevention Network (NBDPN)

For both Medicaid/SCHIP population and subpopulation of foster children, analyzed:

- Prevalence of birth defects

For foster children with fetal alcohol syndrome diagnosis, also analyzed:

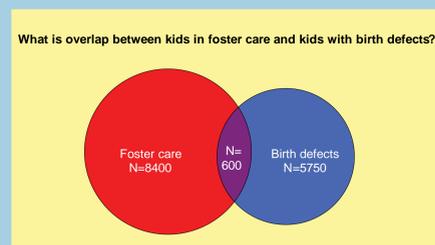
- Overlap of fetal alcohol syndrome and other birth defects
- Prevalence of FAS in American Indian/Alaska Native children
- Age of entry into foster care
- Age at first diagnosis of fetal alcohol syndrome

Results

Foster Children with Birth Defects (n=600)

- 600/8400 = 7% of foster children had birth defects, as compared to 4% of the overall Medicaid/SCHIP population, $\chi^2 = 159.9$, $p = 0$

- 600/5750 = 10% of children with birth defects were foster children

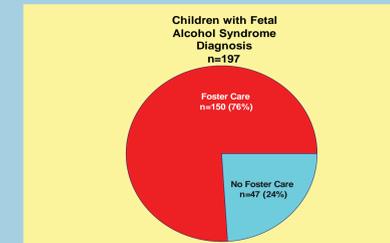
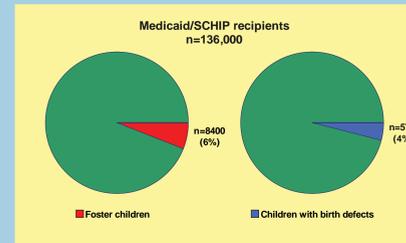


Number of birth defects:

- Foster children had range of 0 to 13 birth defects
- 5% of foster children had more than 1 birth defect

Five most prevalent birth defects in foster children:

1. Possible fetal alcohol syndrome (18 per 1000)
2. Ostium secundum type atrial septal defect (15.6 per 1000)
3. Patent ductus arteriosus (13.9 per 1000)
4. Microcephalus (9.8 per 1000)
5. Ventricular septal defect (9.0 per 1000)



Foster Children with Possible Fetal Alcohol Syndrome (n=150)

Prevalence of possible fetal alcohol syndrome in foster children

- 150/8400 or 18 per 1000 foster children diagnosed with fetal alcohol syndrome, as compared to 1.5 per 1000 children in the overall Medicaid/SCHIP population, $\chi^2 = 888.5$, $p = 0$
- 150 (76%) of the 197 Medicaid/SCHIP children diagnosed with FAS were in foster care.

Other birth defects in children with FAS

- 24% of foster kids with FAS diagnosis had at least 1 other birth defect (range: 1-6 other birth defects)

- » 10% of foster kids with FAS diagnosis had Microcephalus

Race

- 21% of foster children with FAS diagnosis were American Indian/Alaska Native, as compared to 2% of Medicaid/SCHIP recipients overall, $\chi^2 = 282.8$, $p = 0$

Age of FAS diagnosis for those in foster care at birth:

- 84 (56%) of foster kids with FAS diagnosis entered foster care at or close to birth
 - » Of these, 30% received FAS diagnosis at birth
 - » 37% received FAS diagnosis between 1 and 11 months of age
 - » Overall, 68% received FAS diagnosis before their 1st birthday

Discussion

- Medicaid/SCHIP data are a rich resource for information about birth defects in foster children. Results indicate that:

- » The prevalence of birth defects is higher in the Oregon foster care population than in the Medicaid/SCHIP population
- » The prevalence of possible fetal alcohol syndrome is higher in the Oregon foster care population than in the Medicaid/SCHIP population

- The high proportion of foster children with FAS diagnosis is not surprising, given that children with a substance-abusing parent are more likely to suffer from chronic neglect and to be placed in foster care than children with parents who do not abuse substances (U.S. Dept. of Health and Human Services, 1999)

- Children with birth defects may also be more difficult to raise, given their health and behavioral problems. This may also make it more likely that they will end up in foster care.

Implications:

- The human and financial cost of children with birth defects in state custody is very high. It is critical to extend prenatal and preconception care to families at risk, to reduce the incidence of birth defects in these families.

- Providers for foster children require education and assistance to help them deal with the multiple challenges a child with birth defects presents.

Caveats:

- These prevalence rates may be low, both for foster care and overall Medicaid/SCHIP populations.
- Diagnoses only available while children on Medicaid/SCHIP. Some children eligible only a short time.
- ICD-9 diagnoses reflect reimbursement rate, so may provide distorted picture.
- FAS may not be diagnosed until older ages, when children enter school and cognitive delays are noted.