Exploring the Enrollment of Children Born With Birth Defects into Michigan’s Children’s Special Health Care Services (CSHCS) Program

ABSTRACT

Background: Michigan’s Children’s Special Health Care Services (CSHCS) program operates statewide to improve access to care for over 33,000 of children with special needs annually, 1/3 of whom have congenital abnormalities. This study examines enrollment into the CSHCS program for children with select birth defects.

Study Question: Is birthing hospital level of care a predictor of CSHCS program enrollment for children born with easily recognizable birth defects? What additional maternal/child characteristics help further predict enrollment into CSHCS?

Methods: A dataset linking the Michigan Birth Defects Registry, Live Births and CSHCS files for 1998-2003 was used. This study was limited to a group of birth defects easily diagnosable at delivery that also met the CSHCS program eligibility criteria: neural tube defects, hydrocephalus, microcephalus, cyanotic heart diseases, oro-facial clefts and limb reduction deformities. A logistic regression model was developed to control for selected socio-demographic characteristics and thus further predict enrollment into the CSHCS program.

Results: Of 4240 children who met the inclusion criteria, 60.8% were enrolled in CSHCS. Younger mothers and those with less education were more likely to have their children enrolled. The presence of multiple anomalies (OR=2.95 & 2.17) and hospital level of care 1 or 2 (OR=1.71) were more likely associated with enrollment. There was no apparent racial disparity noted between maternal reported race as “black” or “white”, but those who reported race as “other” were significantly less likely to have their child enrolled in CSHCS services.

Conclusions: We were able to identify socio-demographic characteristics of children that are associated with enrollment in CSHCS services. Specific groups are shown to underutilize available resources. Further studies are warranted that examine referral practices as well as barriers to parental participation for eligible populations.

Discussion

Of 4240 children who met the inclusion criteria, 60.8% were found to be enrolled in CSHCS.

Limitations

The race variable is self-reported maternal race and does not include paternal information or ethnicity.

Enrollment in CSHCS is a multi-step process which includes diagnosis, specialist referral, parental acceptance, severity of illness and other parameters that are beyond the scope of this study to address.

Conclusion

We were able to identify socio-demographic characteristics of children that are associated with enrollment in CSHCS services. We have demonstrated that certain groups underutilize available resources. Further studies are warranted that examine referral practices as well as barriers to parental participation for eligible populations.

Public Health Implications

Using Michigan’s linked file that contains data from the MBDR and the CSHCS program helps us to identify characteristics of families who underutilize available services. Recognizing and removing barriers to enrollment may assist health care providers in increasing enrollment for eligible children into Michigan’s CSHCS program.