

Association of Health Care Needs, Care Coordination, and Medical Home with Emergency Department Utilization

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Objective:

The objective of this study was to identify factors associated with increased emergency department (ED) use among children with special health care needs (CSHCNs).

Methods:

Study Setting & Data Sources. Two-phase study of existing data sources: Iowa Compass resources data and the National Survey of Children's Health (NSCH). The NSCH is a representative sample of US children with an oversampling of children with special health care needs (CSHCNs).

Study Population. Children (<18 years) and their families who responded to the NSCH who identified as a CSHCNs.

Data Analysis. First Phase: Descriptive visualizations were used to describe the geospatial patterns of resources for persons with disabilities. Then, clusters of areas with and without access to these resources were identified as rural and urban areas. Second Phase: Univariable and multivariable modelling based on the conceptual model (Figure 1) estimated associations of unmet needs, care coordination, and medical home with ED utilization.

Results:

Among the CSHCNs, 30.1% ($N = 3,874,922$) utilized the ED at least once during the past year; overall 18.9% used the ED once and 11.1% used the ED more than once. ED utilizers were more likely to be publicly insured, have parents with lower educational attainment, and live in a household at or below the federal poverty level. They are also more likely to have medical conditions, but less likely to use therapy services or have a mental, behavioral, or developmental disorder. ED utilizers were more likely to report having a general medical need (non-specialist) unmet ($aOR\ 2.75$, 95% $CI\ [1.26 - 6.04]$), having no medical home ($aOR\ 1.52$, 95% $CI\ [1.12 - 2.07]$), and desiring extra help with care coordination compared to non-ED utilizers ($aOR\ 1.75$, 95% $CI\ [1.15 - 2.65]$).

Conclusions:

About one in three children with special health care needs will visit an ED each year. Unmet general medical needs, wanting more help with care coordination, and no medical home were associated with ED utilization among CSHCNs. The results of this study suggest: (1) general medical care and care coordination contribute to reduced odds of visiting an ED and (2) ensuring families of CSHCNs have adequate health care relationships so that they are comfortable with providers and getting their health needs met could decrease ED visits.