



HEALTH

THE ARTS
CHILD POLICY
CIVIL JUSTICE
EDUCATION
ENERGY AND ENVIRONMENT
HEALTH AND HEALTH CARE
INTERNATIONAL AFFAIRS
NATIONAL SECURITY
POPULATION AND AGING
PUBLIC SAFETY
SCIENCE AND TECHNOLOGY
SUBSTANCE ABUSE
TERRORISM AND
HOMELAND SECURITY
TRANSPORTATION AND
INFRASTRUCTURE
WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world.

Support RAND

[Purchase this document](#)

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

TECHNICAL REPORT

Health and Health Care Among District of Columbia Youth

Anita Chandra, Carole Roan Gresenz,
Janice C. Blanchard, Alison Evans Cuellar,
Teague Ruder, Alex Y. Chen, Emily Meredith Gillen

Supported by the Children's National Medical Center

The research described in this report was supported by the Children's National Medical Center and conducted within RAND Health.

Library of Congress Cataloging-in-Publication Data is available for this publication.

978-0-8330-4805-9

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2009 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND Web site is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2009 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Summary

S.1 Overview

This study provides an assessment of health and health care among the more than 100,000 youth residing in Washington, D.C. It is designed to lay a factual foundation for advocacy and policy decisions related to children's health in the District, as well as to help inform the allocation of community benefit resources by Children's National Medical Center (Children's National), a children's hospital in the District. The three goals of the study are as follows:

1. Describe the health status of District children and their use of health services, with particular attention to changes over time in health status and health care use, as well as differences by age, insurance status, and location within the city.
2. Assess environmental characteristics that may contribute to or buffer against poor health outcomes among children.
3. Consider implications for improving children's health in the District based on the evidence developed in (1) and (2).

Our analyses are based on a synthesis of information from prior research (such as vital statistic reports and studies of the school nursing and school mental health programs), original data analysis of existing survey and administrative data, and information gathered through focus groups with parents, adolescents, and health providers.

S.2 Key Findings

In what follows, we summarize key findings related to particular domains, including health insurance, access to health care, and specific health conditions.

Health Insurance

Most children in the District have health insurance. The rate of uninsurance in the District (an estimated 3.5 percent of children in 2007) is lower than the national rate of uninsurance among children (an estimated 9.1 percent, based on data from the National Survey of Children's Health). However, District parents and providers raised concerns about gaps in insurance coverage for children related to re-enrollment or recertification.

Access to Health Care

Despite the encouraging finding that most District children have health insurance and have a medical home (as reported by their parents), access to care among the pediatric population nonetheless appears to be limited in several problematic ways.

- First, parents in the District are more likely than parents nationwide to report having difficulty seeing a specialist (12 percent in D.C. versus 8 percent nationally).
- District parents, teens, and providers noted particular difficulty accessing dental and mental health care as well as developmental assessments.
- Ambulatory care–sensitive inpatient hospitalization (ACS-IP) rates, which are related to the availability and efficacy of primary care, *increased* among the youth population in the District between 2004 and 2007, suggesting a worsening trend in access to or quality of ambulatory care. The most notable increase was among children ages 0–4.
- Among publicly insured children specifically, rates of office-based health care use in the District appear to be well below national rates.
- Rates of hospital use among publicly insured children were substantial. For example, among nondisabled children in managed care, about 27 percent use the emergency department (ED) during a year and among disabled children in managed care, that figure was 42 percent. Further, a segment of the publicly insured youth population appears to use the ED heavily (more than 3–5 times per year), possibly as a primary source of care. Finally, inpatient readmission rates among publicly insured children show room for significant improvement.

Barriers to Health Care

Barriers to access to primary and specialty care in nonhospital settings are multiple and complex.

- At least some of the access problem lies in the availability of primary and specialty care providers.
 - In focus groups, District parents indicated that availability of appointments for primary care was a key factor limiting access.
 - Both parents and providers pointed to limited availability of off-hours (evening, weekend, early morning) ambulatory care.
 - With regard to specialty care, available data suggest that the distribution of pediatric specialists is uneven across locations throughout the city and is not correlated with children’s health care needs. A particular dearth appears to exist for pediatric mental health specialists east of the Anacostia River.
- Capacity is not the only factor limiting the accessibility of ambulatory care, however. In focus groups, District parents, teens, and providers noted several issues, including
 - a perceived lack of understanding among providers of cultural and neighborhood issues important to their health care
 - the developmental appropriateness of health services for adolescents
 - health care providers’ general approach to and communication style with adolescents

- limited availability of providers who speak languages other than English and/or of interpreters
- the inaccessibility of providers and challenges with existing services for transportation assistance
- the limited amount of health education and health promotion available in schools and community settings
- lack of a standard, uniform, and facile process for the authorization of specialty care referrals.

Priority Health Conditions and Health Behaviors

Particular health conditions and health behaviors warrant special attention because of their prevalence, importance to health, and/or the patterns of health care use associated with them.

- Asthma
 - Among children in Medicaid/Alliance managed care and fee for service (FFS) Medicaid, 8 and 5 percent of enrollees who use services, respectively, had asthma. Asthma was one of the top ten most prevalent qualifying conditions among children enrolled in Health Services for Children with Special Needs (HSCSN).
 - Children with asthma use substantial hospital-based services. For example, asthma contributed to between 11 and 16 percent of inpatient hospitalizations in 2007 among all District youth ages 0–13, and asthma was one of the most common conditions associated with ACS-IP hospitalizations among youth ages 0–17.
- Mental Health Conditions and Developmental Delays
 - A substantial fraction of children in the District experience mental health problems or developmental delays. For example, among children in HSCSN, nearly two-thirds of the qualifying diagnoses for HSCSN were mental health or developmental disorders; among children in Medicaid/Alliance managed care and FFS Medicaid, between 4 and 14 percent of enrollees, respectively, who used services have a mental health disorder or developmental delay. Mental health conditions contributed to 13–14 percent of inpatient stays among those ages 5–17.
 - These disorders are a substantial contributor to hospitalizations among youth. For example, mental illness was a factor in between 3 and 5 percent of ED visits among older youth and young adults. Episodic mood disorders, in particular, were associated with a substantial fraction (between 8 and 10 percent) of inpatient hospitalizations among District youth ages 5–17. In addition, among managed care enrollees, the inpatient hospital readmission rate was higher in instances where the initial inpatient admission was related to a mental health issue.
 - Available evidence suggests many children with mental health disorders are not receiving adequate nonhospital behavioral health care. For example, one-third of children with episodic mood disorder in HSCSN did not appear to have a mental health visit (home or office based) during the year. The same was true for nearly three-fourths of children with an emotional disturbance, two-thirds of children with pervasive developmental disorders or adjustment disorders, and more than half of children with depressive disorder.

- HIV/AIDS
 - The District had the highest rate of newly reported cases of AIDS in the country. Among children under age 13, 86 percent of new HIV cases progressed to AIDS within one year. Sixty percent of cases among those ages 13–19 years progressed to AIDS within one year of diagnosis.
- Sickle Cell Anemia
 - District children with sickle cell anemia had high hospitalization rates. For example, more than three-fourths of children with sickle cell anemia enrolled in HSCSN had at least one ED visit during the year (although not all ED visits were necessarily related to sickle cell anemia). Further, nearly 30 percent of HSCSN enrollees with sickle cell anemia were heavy ED users. More than half had at least one inpatient stay and 19 percent had three or more inpatient stays (though hospitalizations could have been for issues unrelated to the sickle cell anemia).
- Obesity/Overweight
 - Rates of obesity/overweight among children are high and have been rising across the United States, and the District is no exception. Among youth ages 6–12 in the District, 19 percent are reportedly obese, and an additional 15 percent are overweight. Similarly, 15 percent of District youth ages 13–17 are obese, and an additional 15 percent are overweight. Some data suggest that overweight and obesity are even *more* of an issue in the District than nationally: A greater percentage of youth in grades 9–12 are reportedly obese in the District (18 percent) compared to the nation (13 percent).
- Sexual and Reproductive Health
 - Teen pregnancy rates decreased steadily in the District between 2002 and 2007; however, recent reports indicate that these numbers are increasing again.
 - The percentage of District youth reporting sex before age 13 (13 percent) was nearly double the national rate (7 percent).
 - Rates of chlamydia and gonorrhea infection were nearly three times the national average.
- Substance Use and Abuse
 - An encouraging finding is that use of cigarettes and alcohol is less common among District youth than in youth nationally. Among District youth in grades 9–12, 11 percent report currently smoking, compared to 20 percent of youth nationally. The prevalence of binge drinking was 12 percent (in the last 30 days) among District youth, compared to 26 percent nationally.
 - However, rates of illicit drug use in the District were higher than those in the United States as a whole for heroin and illegal injection drugs. In 2007, 5 percent of District teens reported using heroin and just under 6 percent reported using injection drugs (versus 2 percent nationally for each).

Socioeconomic Environment, Safety, and Violence

- Though the rate of children in poverty has declined in recent years (from 27 percent to 23 percent between 2003 and 2007), the percentage of children who live in poverty in the District is still higher than it is nationally (23 percent versus 18 percent).
- Safety and violence are particularly important issues facing District youth.
 - The rate of dating violence in the District increased from 11 percent to 17 percent from 2005 to 2007 and is significantly higher than the U.S. rate of 10 percent.
 - Fourteen percent of youth in the District reported feeling unsafe in school compared to 6 percent nationally.
 - Rates of child abuse and neglect are twice the national average; consequently, there are far more children in the foster care system in the District compared to the nation.

Variability in Pediatric Health, Health Care, and Health Environment Across the District

Substantial variability exists across the District in the environments in which District children live, which are likely to affect their health significantly. Health and health care outcomes also vary considerably for different locations within the District.

- Derived indices of the local health and socioeconomic status (SES) of District children suggest that several areas of the District may benefit most from interventions to improve the health environment. These include Columbia Heights, Mt. Pleasant, Pleasant Plains, Park View, Ivy City, Arboretum, Trinidad, Carver Langston, Near Southeast, Navy Yard, Historic Anacostia, Eastland Gardens, Kenilworth, Mayfair, Hillbrook, Mahanig Heights, Deanwood, Burrville, Grant Park, Lincoln Heights, Fairmont Heights, River Terrace, Benning, Greenway, Fort Dupont, Capitol View, Marshall Heights, Benning Heights, Woodland/Fort Stanton, Garfield Heights, Knox Hill, Sheridan, Barry Farm, Buena Vista, Douglass, Shipley Terrace, Congress Heights, Bellevue, and Washington Highlands.
- Specific issues for particular wards within the District also include the following:
 - Fewer children in Wards 1, 6, 7, and 8 reported exercising regularly.
 - Ward 8 had the highest rate of violence-related deaths in the District.
 - Children in Wards 7 and 8 were less likely to have a medical home compared to children residing in other areas of the city.
 - Children in Wards 1, 2, and 3 were less likely to have a preventive dental visit than District children residing in other areas of the city.
 - The rate of having problems with seeing specialists was substantially greater among children in Ward 7 (31 percent).
 - Among youth 0–4, ACS rates (ED and IP) were highest in Public Use Microdata Area (PUMA) B, which contains most of Ward 4 and parts of Wards 1 and 5; ACS-IP rates increased substantially in PUMA D, which contains Wards 7 and 8.
 - Among youth 5–13 and 14–17, ACS rates were highest in PUMA B (most of Ward 4 and parts of Wards 1 and 5) and PUMA E, constituting parts of Wards 1, 2, and 6.
 - Among those 18–24, ACS rates were highest and recently increased in PUMA D (Wards 7 and 8).

S.3 Implications for Advocacy and Policy

These findings suggest critical next steps for District policymakers, organizations, and individuals invested in improving child health. Key recommendations include the following:

1. **Continue the District's commitment to health insurance coverage.** While child insurance rates are commendable, insurance continuity was an issue raised by parents and providers. In light of recent budget slowdowns, maintaining this coverage is essential.
2. **Implement strategies to increase children's access to and use of primary and specialty care.** Continuing to build primary care capacity includes increasing the network of providers through better and more expedient reimbursement, reimbursement for case managers, and such incentives as support for electronic health record implementation. Incentives to increase the specialty care supply include loan repayment for providers and strategies such as "e-referrals" to reduce the need for specialty care appointments. The reported quality of services also limits the accessibility of ambulatory care. Issues such as a lack of provider respect could be addressed by performance-based accountability systems that regularly include client input on health care experiences and cultural competency trainings for providers.
3. **Focus interventions on children with particular health conditions.** Prevalent conditions among children using the majority of health services include asthma, mental health disorders, sickle cell anemia, HIV/AIDS, and obesity. These findings call for greater focus on early intervention. Expanding asthma management programs for children, improving the distribution of mental health providers, addressing the stigma related to mental health, and increasing healthy food options are important places to start. Further, it is essential to identify policies that will increase the availability of antiretroviral therapy in order to slow the quick progression of HIV to AIDS among pediatric populations.
4. **Implement strategies that emphasize prevention and wellness.** Data also suggest that the experience of and exposure to violence, general mental health, and sexual health issues continue to be problems for District youth. Comprehensive health education is a long overdue prevention investment. For example, the District needs more investment in emotional wellness programs; violence prevention programs that address school safety issues; and sexual health interventions that combine discussions of risky sex with life skills training.
5. **Target investments and interventions to children residing in particular areas within the District.** The variability of health and health care outcomes of children residing in different parts of the city suggests that targeting interventions based on location may be an efficient and effective way to reach the children most in need. Consider the benefits of place-based interventions or wellness zone models that emphasize multilevel, cross-sector intervention.
6. **Increase efforts to continuously and more comprehensively monitor children's health.** Ongoing monitoring of children's health and health care access is crucial to identifying emerging health issues, evaluating the effect of policy or local changes, and ensuring

appropriate and timely response to identified needs. More data on health care capacity and environmental health risks, annual or biennial assessment of child health, and routine analysis of administrative data are needed. Consideration of youth not reflected in current surveys should be addressed.

7. **Improve pediatric health through investments outside the health care delivery system.** Investments in education, housing, neighborhood safety, the natural environment, and the like must be viewed as additional if not equally critical levers for improving children's health.