



HEALTH

THE GEORGE WASHINGTON UNIVERSITY
SCHOOL OF PUBLIC HEALTH
AND HEALTH SERVICES

***Assessing Health, Health Care and
Emergency Care
in the District of Columbia***

January 2008

The District of Columbia Is Investing \$200M to Improve the DC Health Care Delivery System

- **In August 2006, Mayor's Health Care Task Force convened to discuss several possible ways of distributing tobacco settlement funds**
 - **“Healthplex”**
 - **Investment in existing hospitals**
 - **Investment in new hospital**
 - **Investment in DCPCA “Medical Homes” project**
- **Task Force suggested additional information be gathered before proceeding with disbursement of funds**

RAND Was Asked to Conduct An Assessment of Health Needs and Health Care Services

Three main goals:

- **Conduct a comprehensive health needs assessment**
- **Assess quality and accessibility of health care services for individuals with urgent/emergent medical needs**
- **Identify and assess policy options to improve health care delivery system in light of findings from first two goals**

Briefing Focuses Only on Findings Related to First Two Goals

- ➔ Conduct a comprehensive health needs assessment**
- ➔ Assess quality and accessibility of health care services for individuals with urgent/emergent medical needs**

A subsequent report will identify and assess policy options.

Study Used Existing Survey and Administrative Data and Key Informant Interviews

Existing Survey Data

- Behavioral Risk Factor Surveillance System (BRFSS)
- National Survey of Children's Health (NSCH)

Administrative Data

- Claims data from three managed care organizations serving DC Medicaid and Alliance programs
- DC Hospital Association Inpatient and ED Discharge Data
- DC Cancer Registry
- DC Health Professional Licensing Administration
- FEMS Computer Aided Dispatch (CAD) data

Key informant Interviews

- Emergency services stakeholders, hospital leadership

Organization of Findings

- **Health Status**
- **Access to Care**
- **Health System Capacity**
- **Emergency Care**
- **Conclusions**

Rates of Chronic Disease, Premature Mortality, and Cancer Among Adults Were Especially High in Wards 7 and 8

	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8
Fair/poor health	15.7	7.7	5.3	13.5	14.9	11.6	23.3	14.2
Heart disease	3.1	3.1	3.9	6.0	5.6	4.8	6.4	3.4
Hypertension	22.7	15.4	13.9	30.4	32.5	28.2	37.6	35.5
Diabetes	6.0	5.0	3.3	9.8	10.3	9.2	12.2	11.0
Asthma	8.4	9.7	8.3	11.6	10.8	8.2	12.2	9.9
Obesity	17.4	13.7	9.3	30.5	29.4	23.3	29.4	33.3
Premature mortality*	505	476	140	461	652	509	696	789
Breast cancer incidence*	111	106	118	127	109	114	104	145
Premature cancer mortality*	133	114	57	114	98	83	166	118

*Age-adjusted rates per 100,000 population

 Higher than city mean

 Lower than city mean

 Maximum value

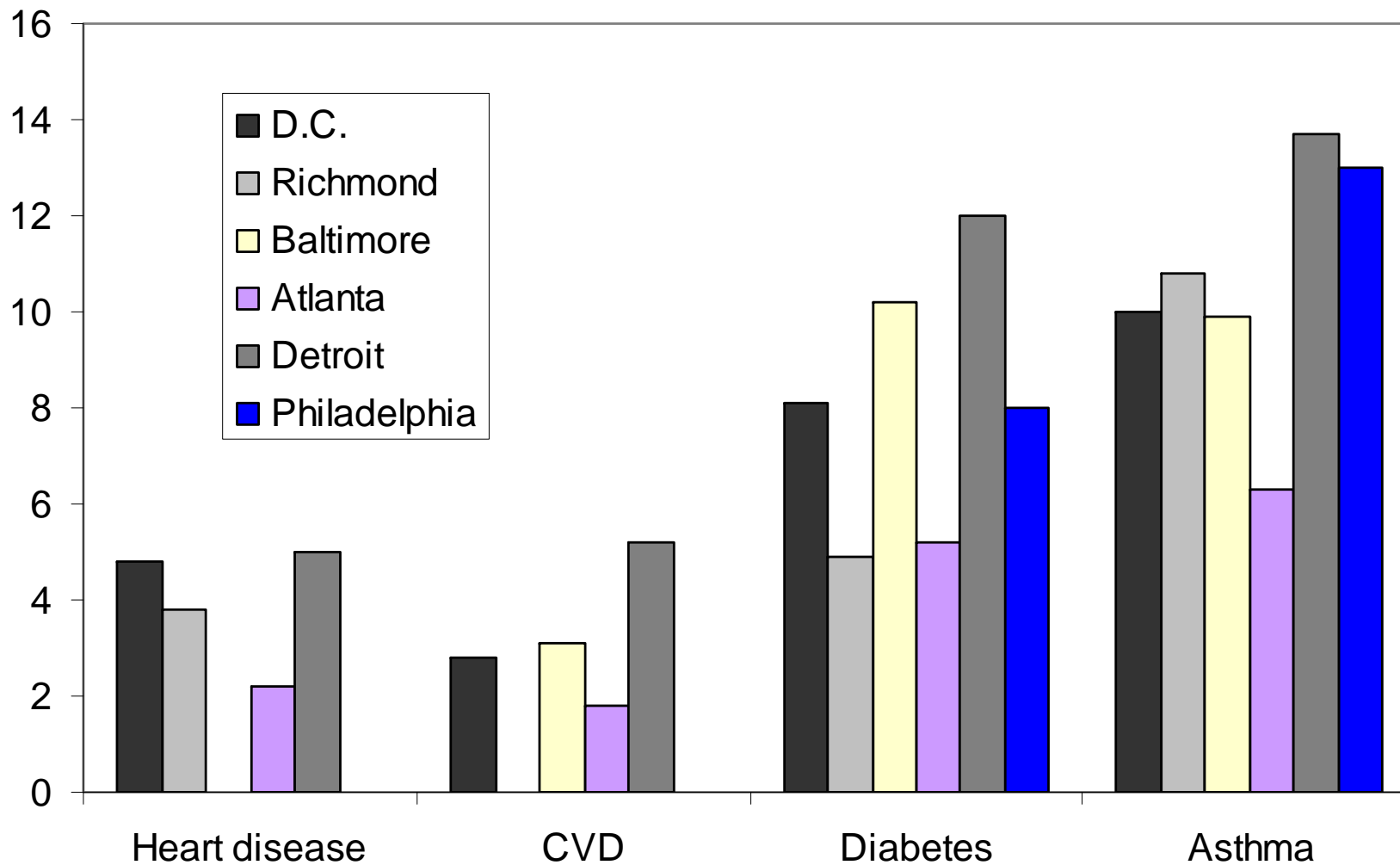
Health Outcomes Were Better Among Children In Ward 3 Compared to Other Wards

	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8
Fair/ poor self-reported health	6.3	9.2	0.6	1.9	4.4	3.0	4.4	4.5
Fair/poor dental health	12.0	9.5	2.1	9.2	9.4	10.4	9.6	5.8
Limitation in activity or function	4.8	2.9	2.8	5.7	5.0	10.2	10.8	8.6
Overweight (6-12 years)	35.4	25.5	10.8	30.4	36.5	49.7	36.4	44.2
Asthma	7.6	5.0	3.9	9.1	14.9	12.6	17.9	12.1

All percentages are for 2003.

 Higher than city mean  Lower than city mean

Available Data Suggest Rates of Chronic Disease in the District Are Similar to “Benchmark” Cities



Roadmap

- **Health Status**

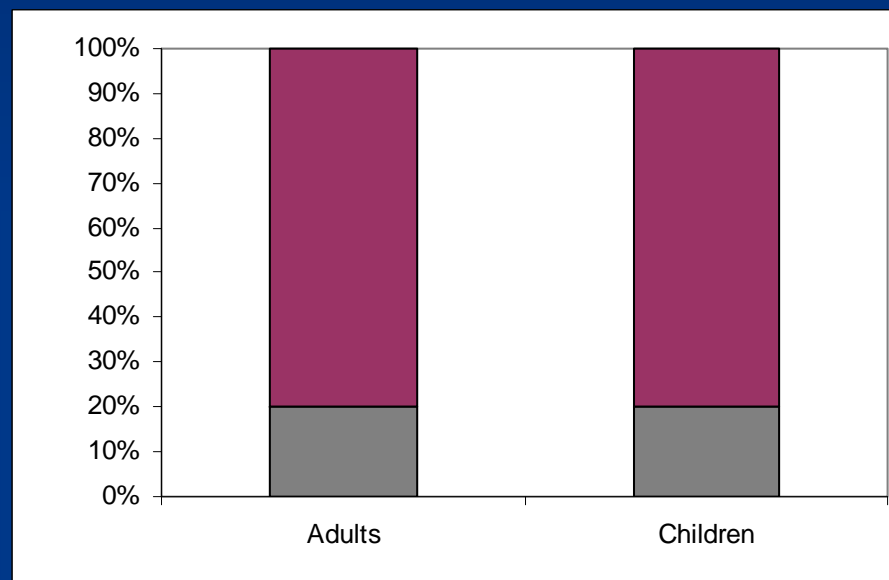
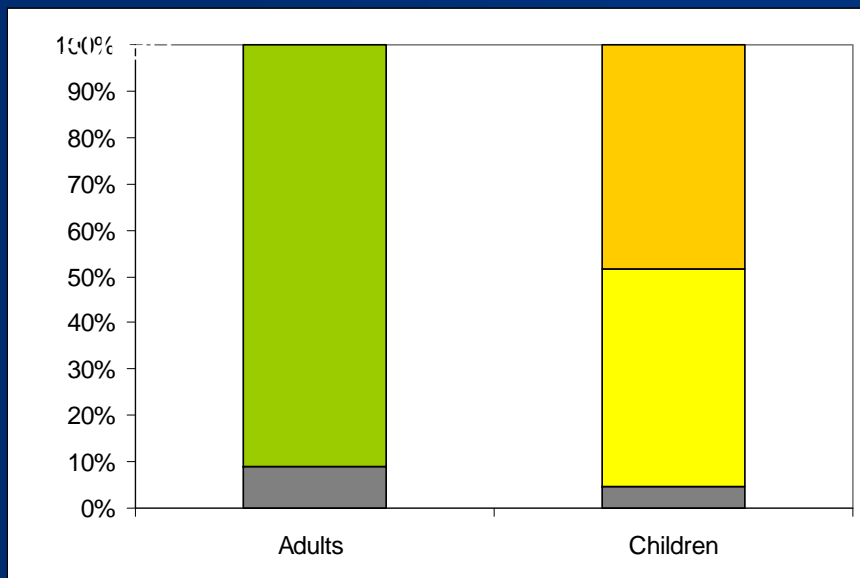
- **Access to Care**

- **Health System Capacity**

- **Emergency Care**

- **Conclusions**

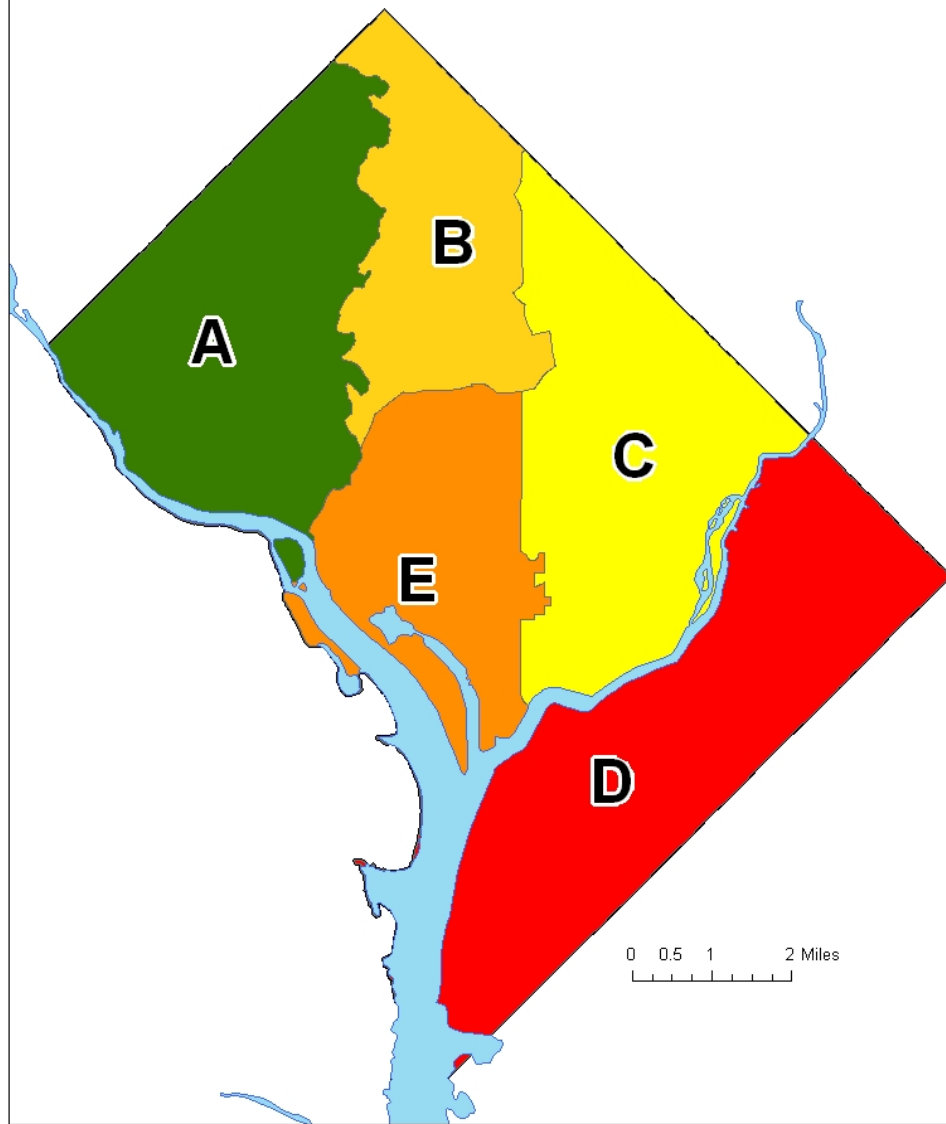
Despite Relatively High Rates of Insurance, 1 in 5 District Residents Lacks a Usual Source of Care



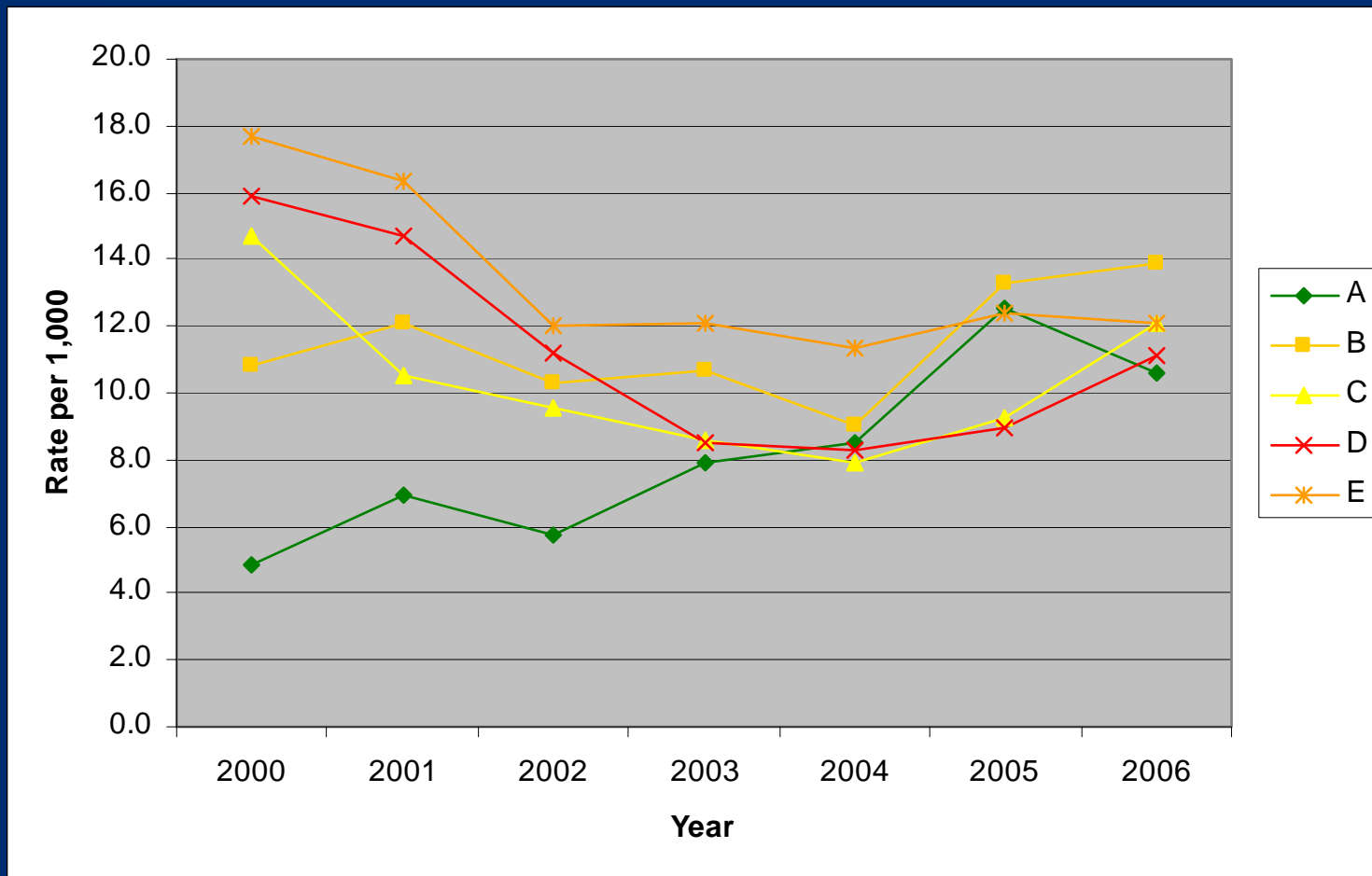
Ambulatory Care Sensitive (ACS) Inpatient Admissions and Primary Care Sensitive (PCS) ED Visits Provide a Window Into Primary Care

- **Ambulatory care sensitive (ACS) admissions**
 - **Likely to be preventable with timely access to high quality primary care**
 - **For conditions such as asthma or heart failure**
- **Primary care sensitive (PCS) ED visits**
 - **Visits for conditions that are non-emergent; emergent, but primary care treatable; or emergent, but preventable or avoidable**
- **ACS and PCS rates are commonly used markers for the availability and effectiveness of primary care**

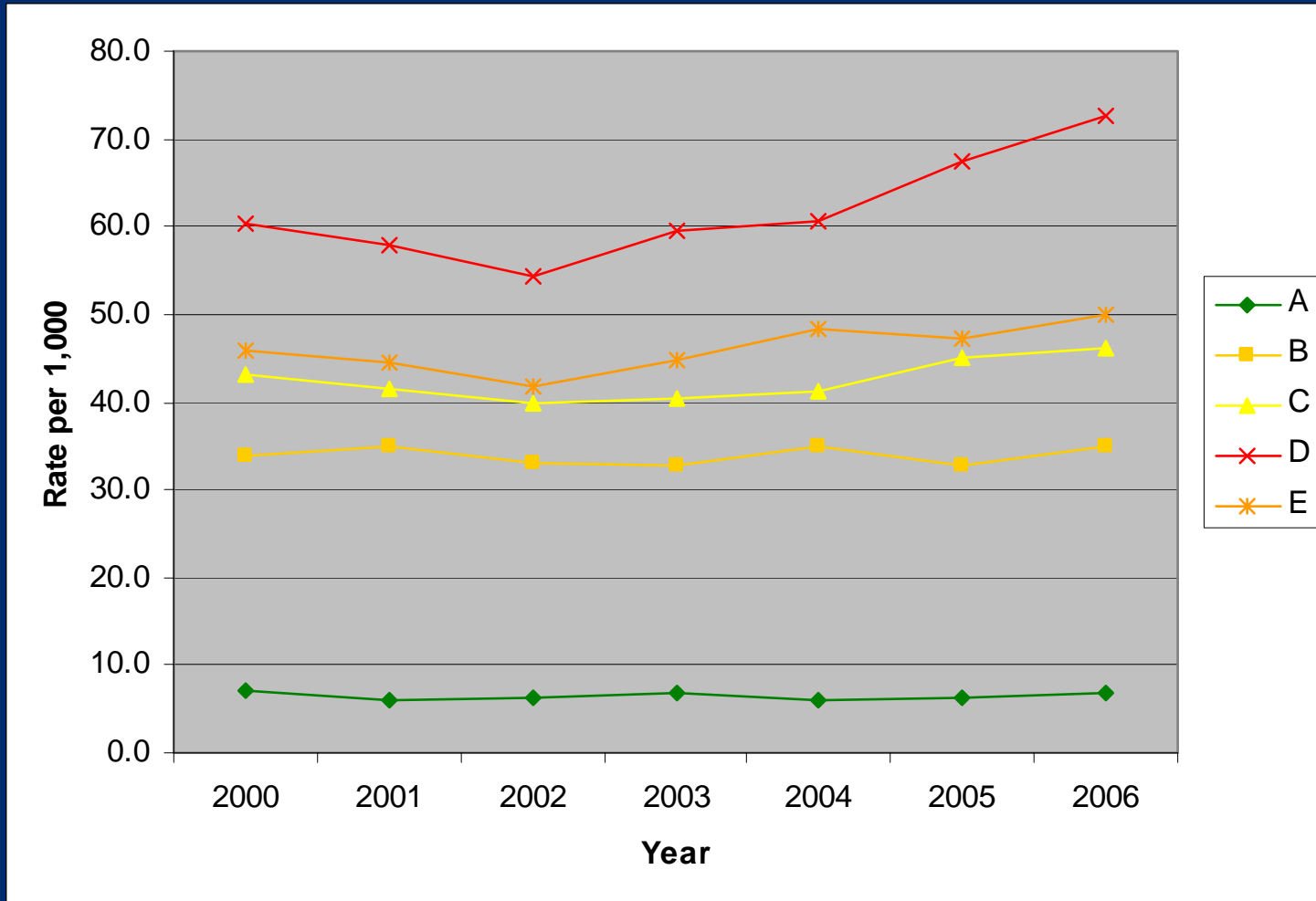
DC PUMAs



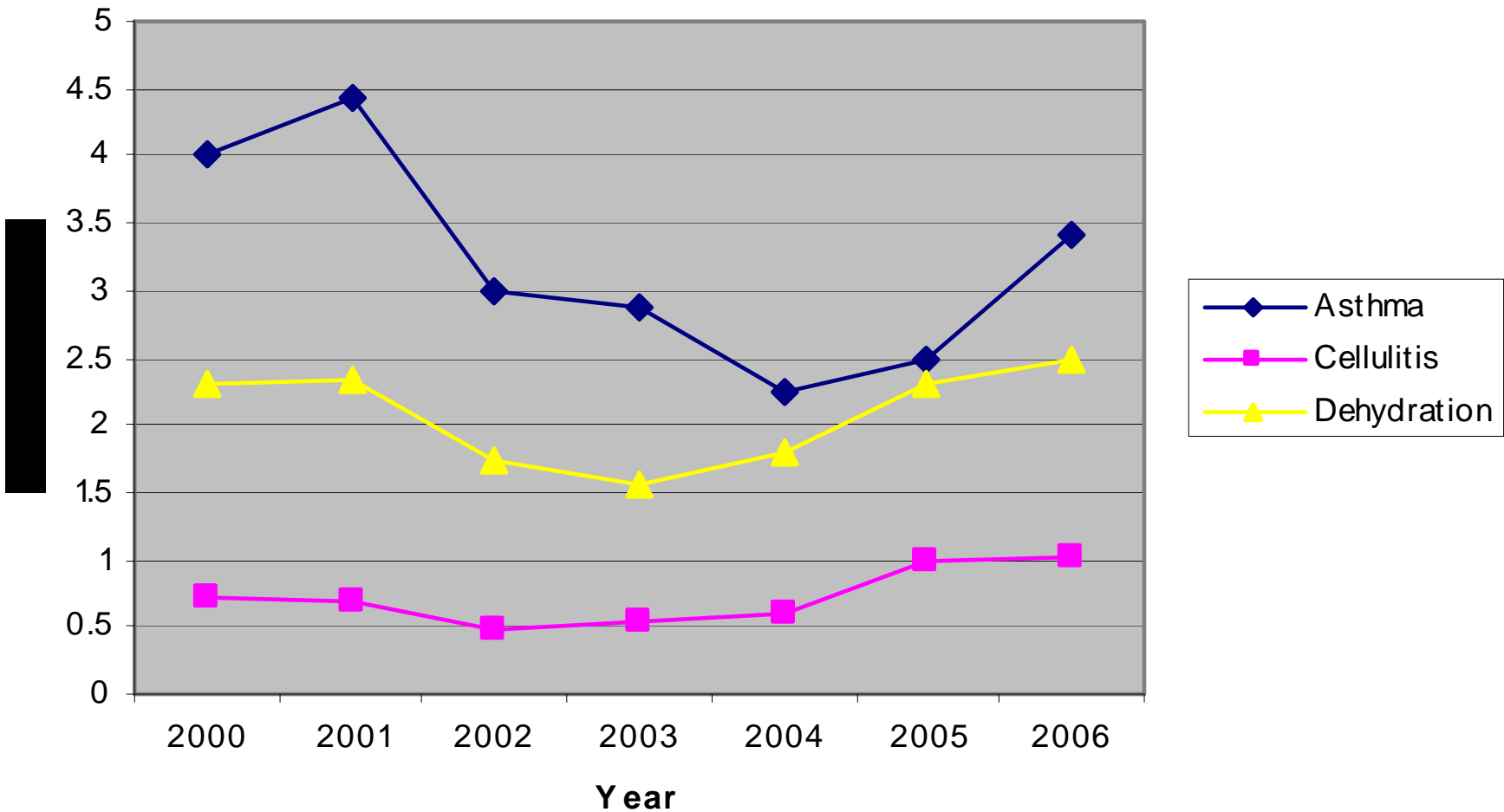
Rates of ACS Admissions for Children Have Been Rising In Nearly All Locations Across the City



ACS Rates Among Adults Ages 40-64 Have Also Been Rising Since 2004

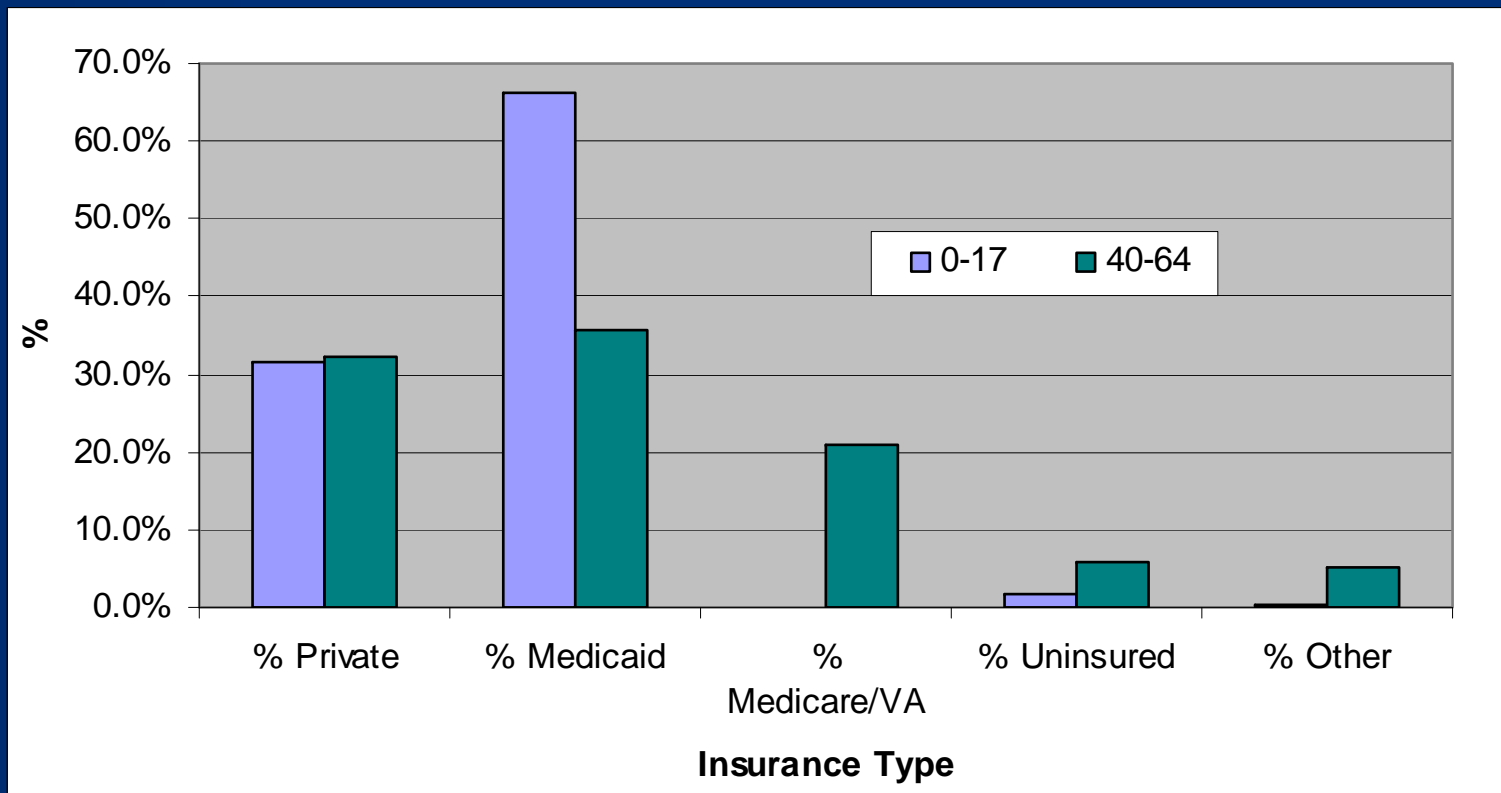


Among Children, ACS Admissions for Asthma, Cellulitis, and Dehydration Have Contributed to Rising ACS Rates



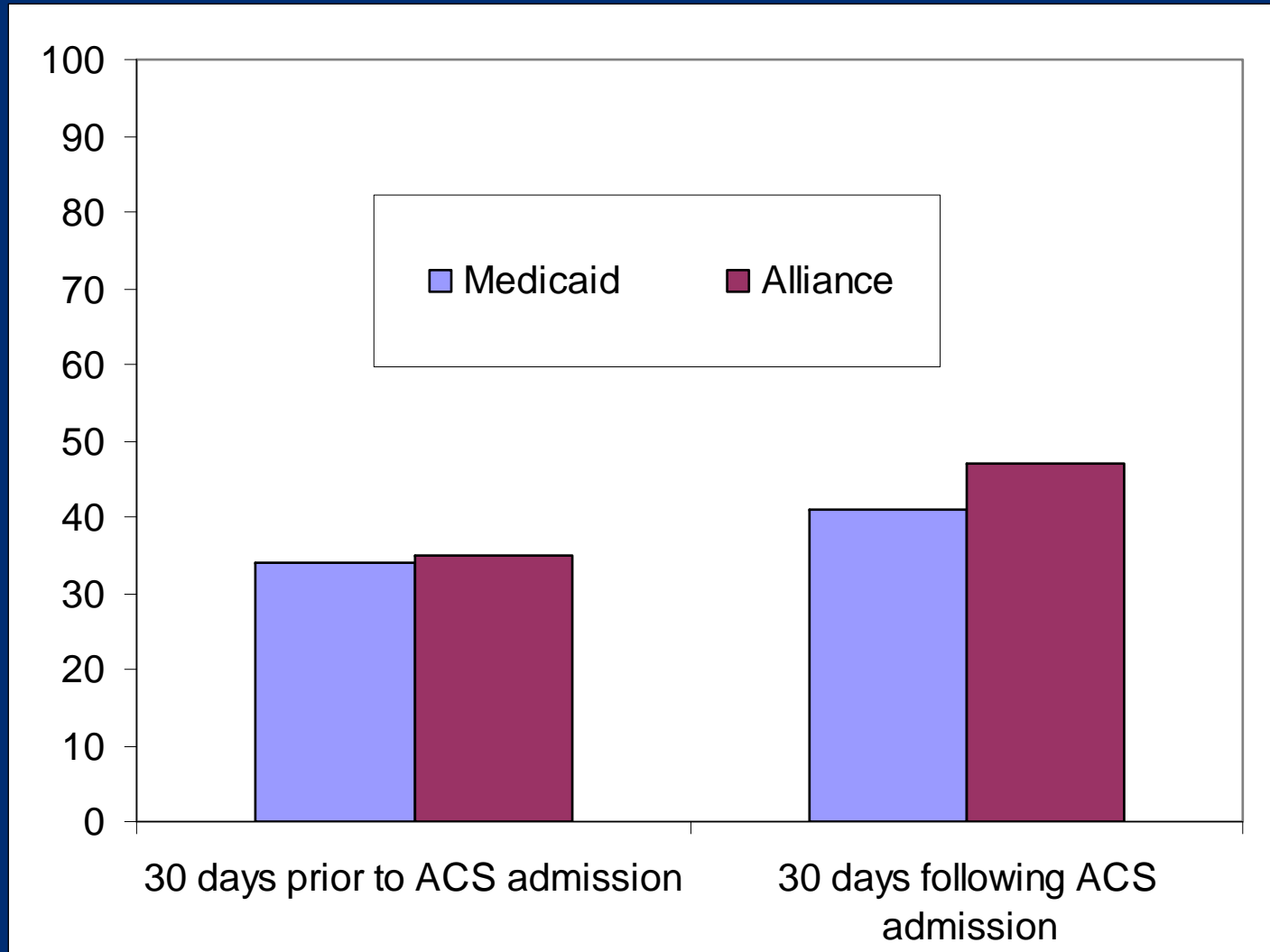
ACS Admissions Are Not Only a Problem Among District Residents Who Are Publicly Insured

Payer Distribution for 2006 ACS Admissions



Most Publicly Insured Patients With ACS Hospitalizations Did Not Have Outpatient Care in the Month Prior to or Following Admission

Percentage
with an
Office-
Based Visit



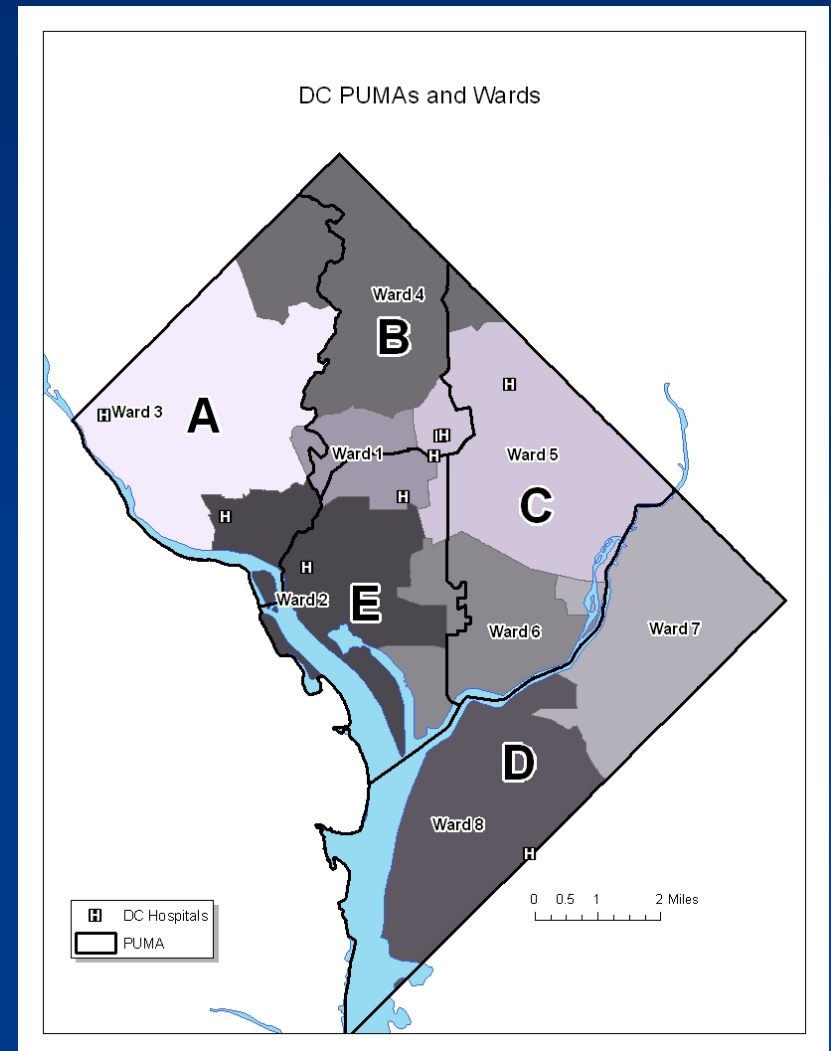
Among Children and Adults, Access to Care is More Limited in PUMAs B, C, and D

- Among children

- Usual source of care
- Percentage with a well-child visit
- ACS rates

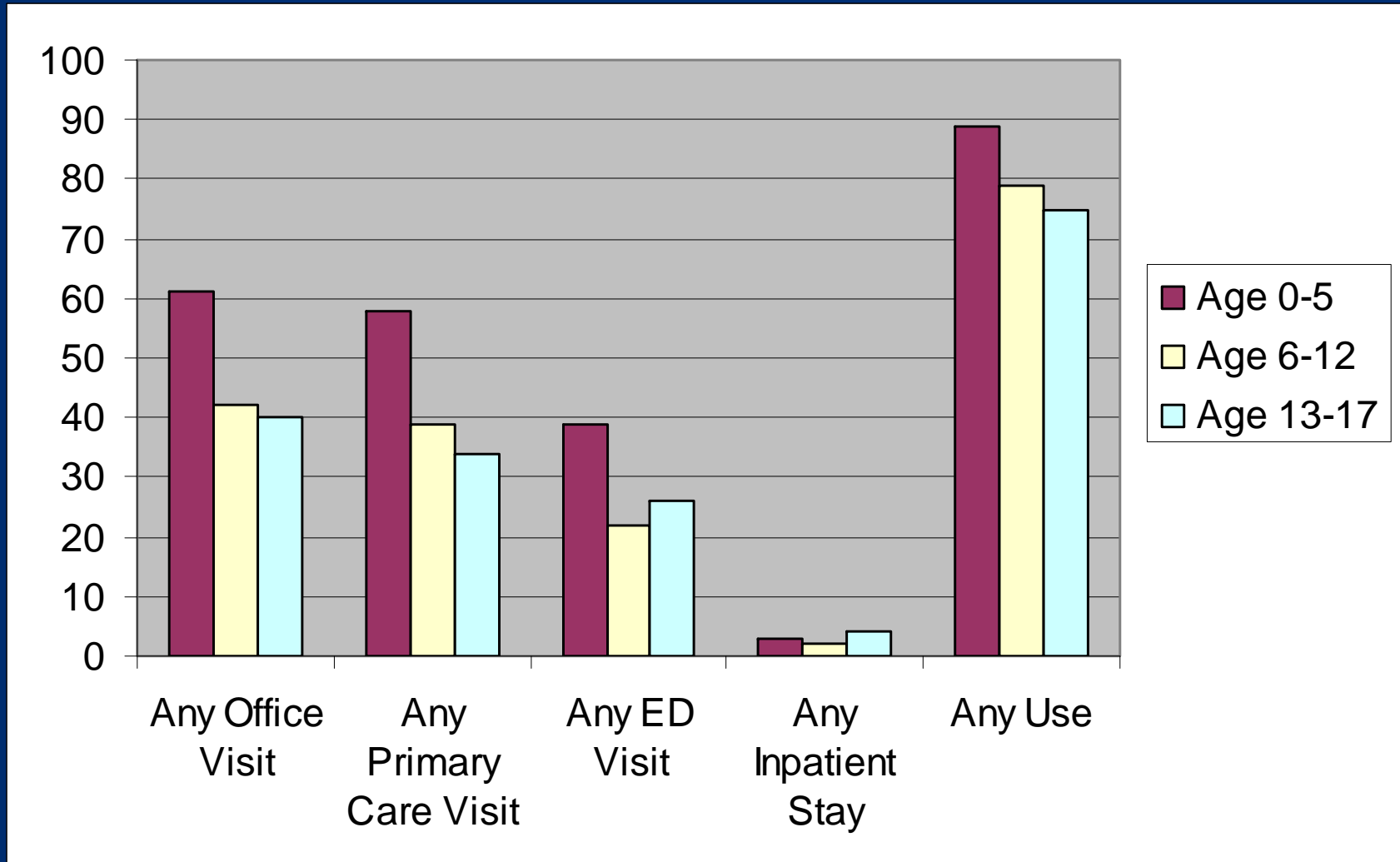
- Among adults

- Usual source of care
- Percentage with a check-up in the last two years
- ACS rates

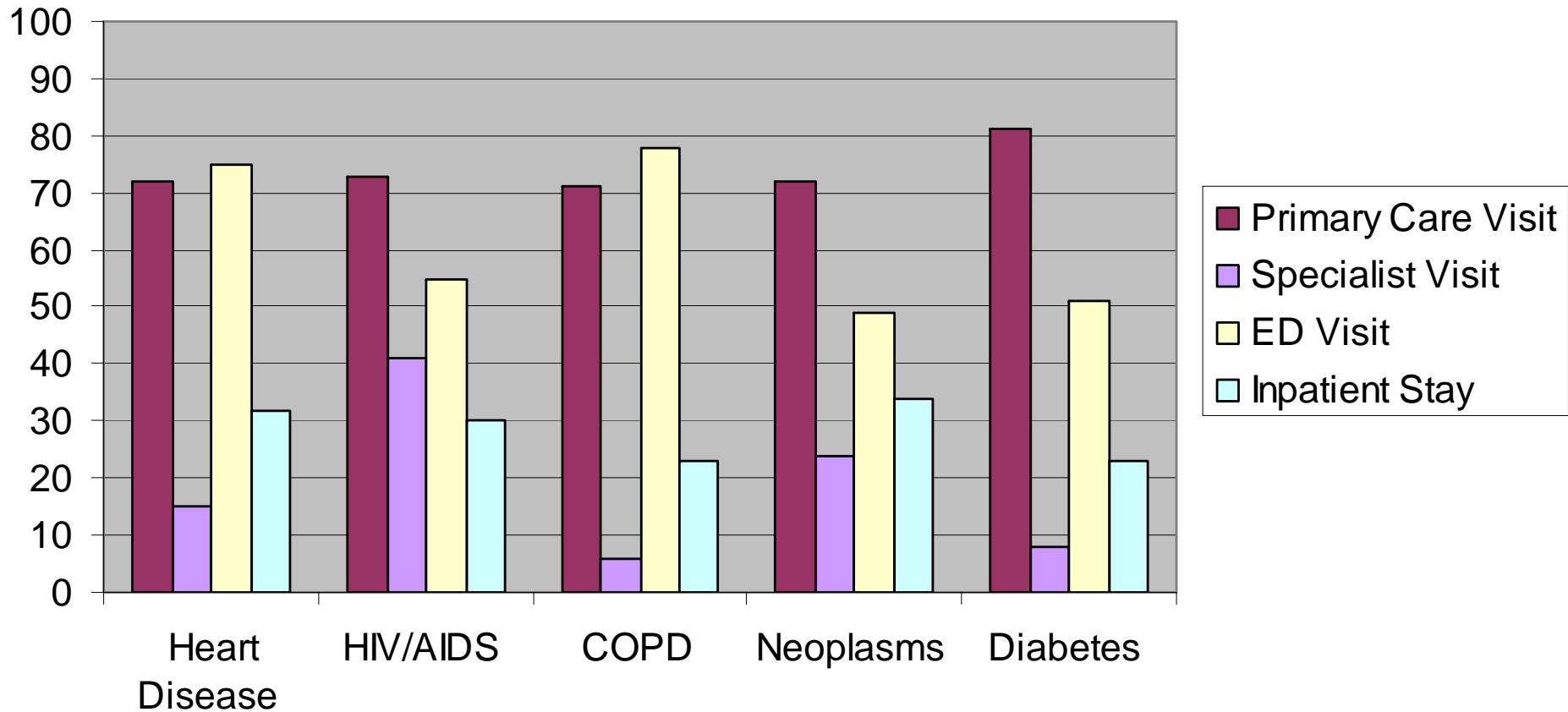


Rates of Primary Care Use Among Publicly Insured Children are Low; Rates of ED Use are High

Use of Care Among Children Enrolled in Medicaid (2006)



Specialty Care Use is Low, Hospital Use is High Among Adult Medicaid Enrollees with Chronic Conditions



Roadmap

- Health Status
- Access to Care

Health System Capacity

- Emergency Care
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Roadmap

- Health Status

- Access to Care

- Health System Capacity

 - Outpatient

 - Inpatient

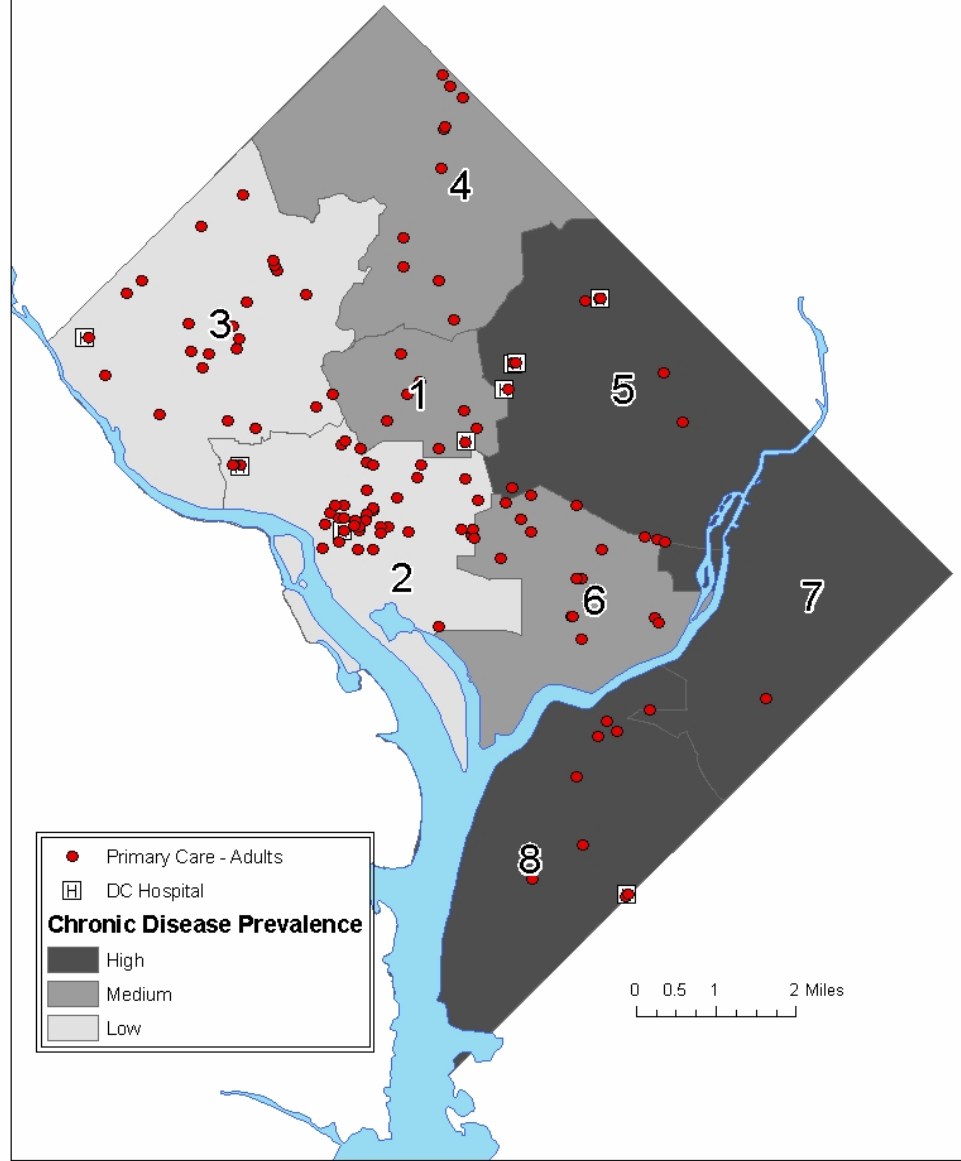
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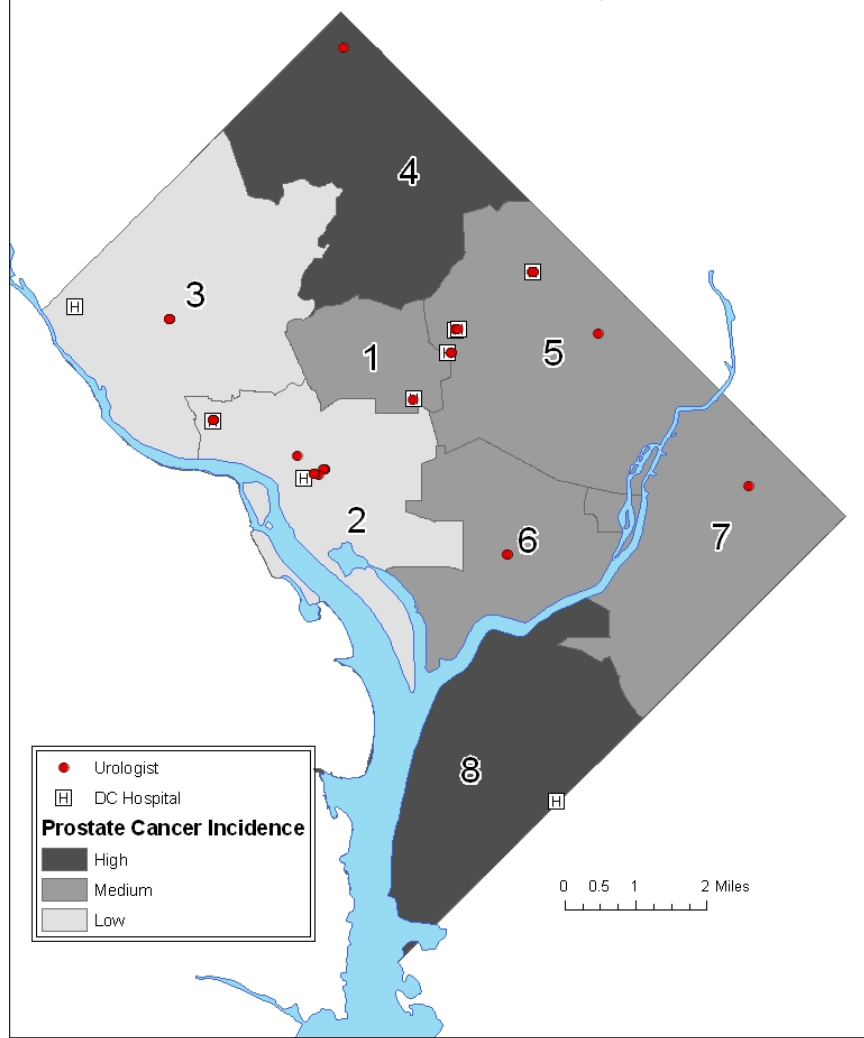
Provider Availability

- **Primary and specialty care provider supply in the District as whole is comparable to available benchmarks**
- **Maldistribution is evident**
- **Do not know :**
 - **% of time providers spend in the District**
 - **% accepting Medicaid/Alliance**
 - **% accepting new patients**

Location of DC Adult Primary Care Physicians with Chronic Disease Prevalence by Ward



Location of DC Urologists with Prostate Cancer Incidence by Ward



Roadmap

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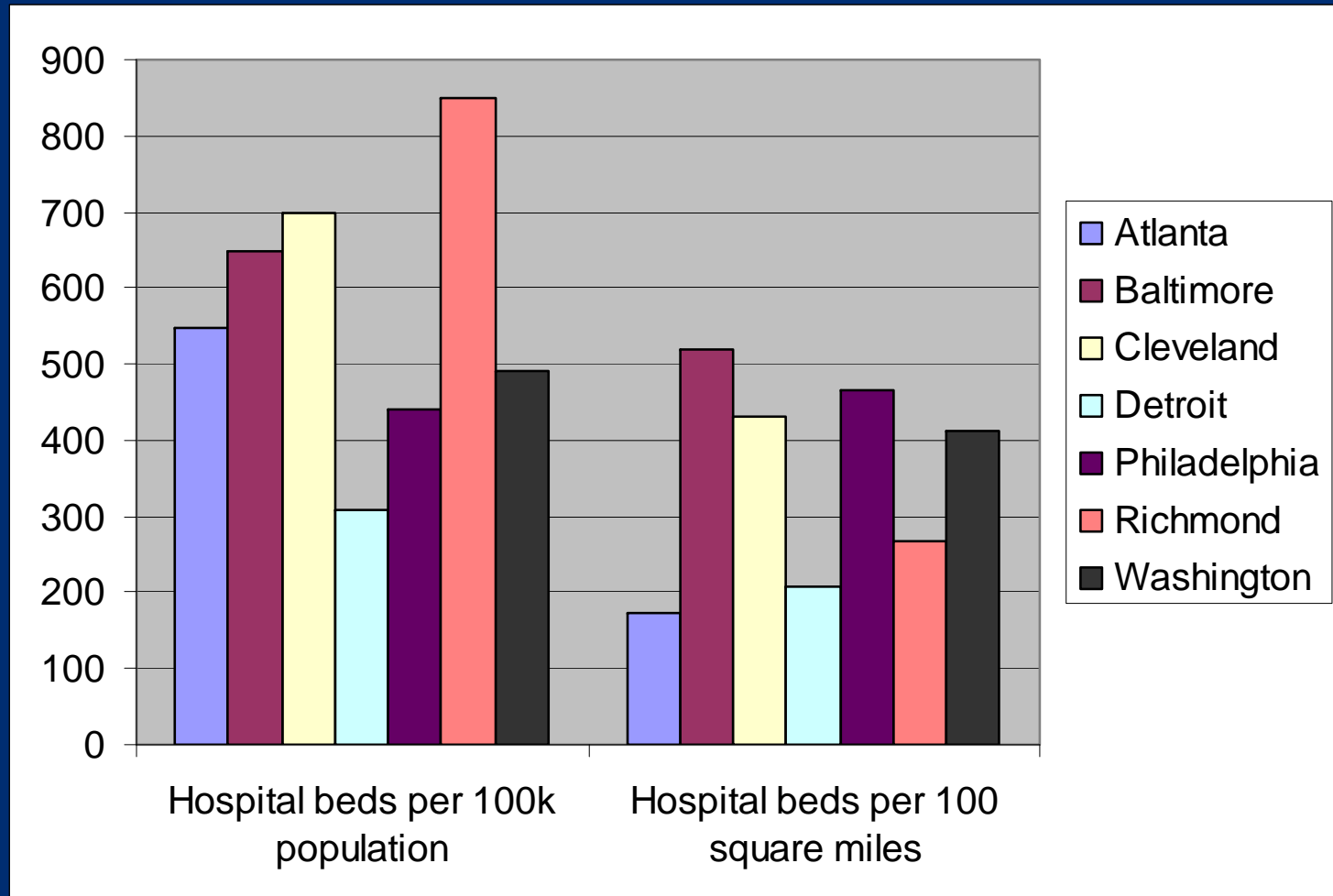
 - Outpatient

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Hospital Capacity is Within the Range of Benchmark Cities



Occupancy Rates Between 70-80 Percent with a Slight Trend Up; 1/3 of Admissions Are ACS

Aggregate Hospital Occupancy Rate, 2000-2006

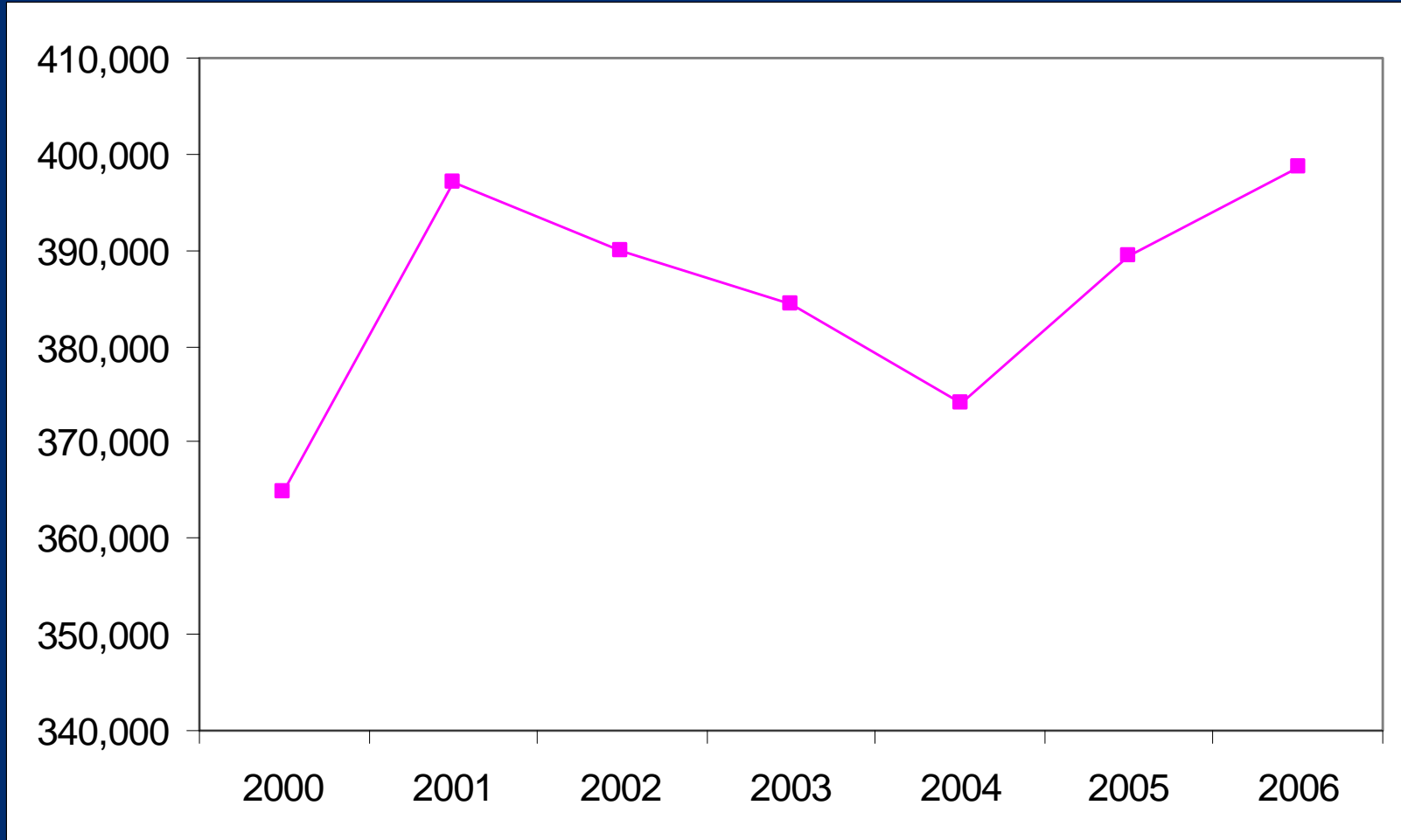




Roadmap

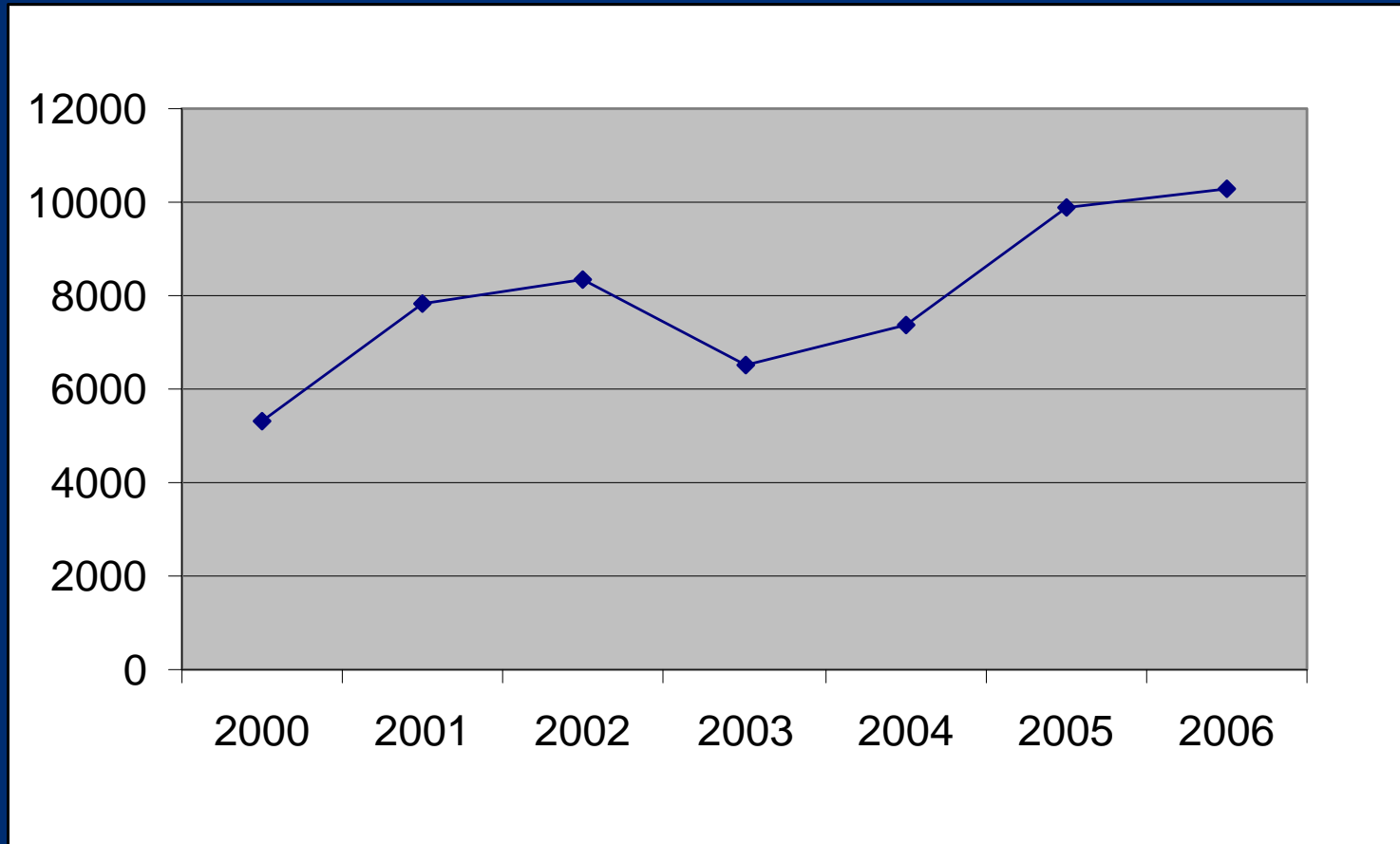
- Health Status
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Volume of ED Visits Decreased 2001-2004 But Have Since Risen 6 Percent (24k Additional Visits)

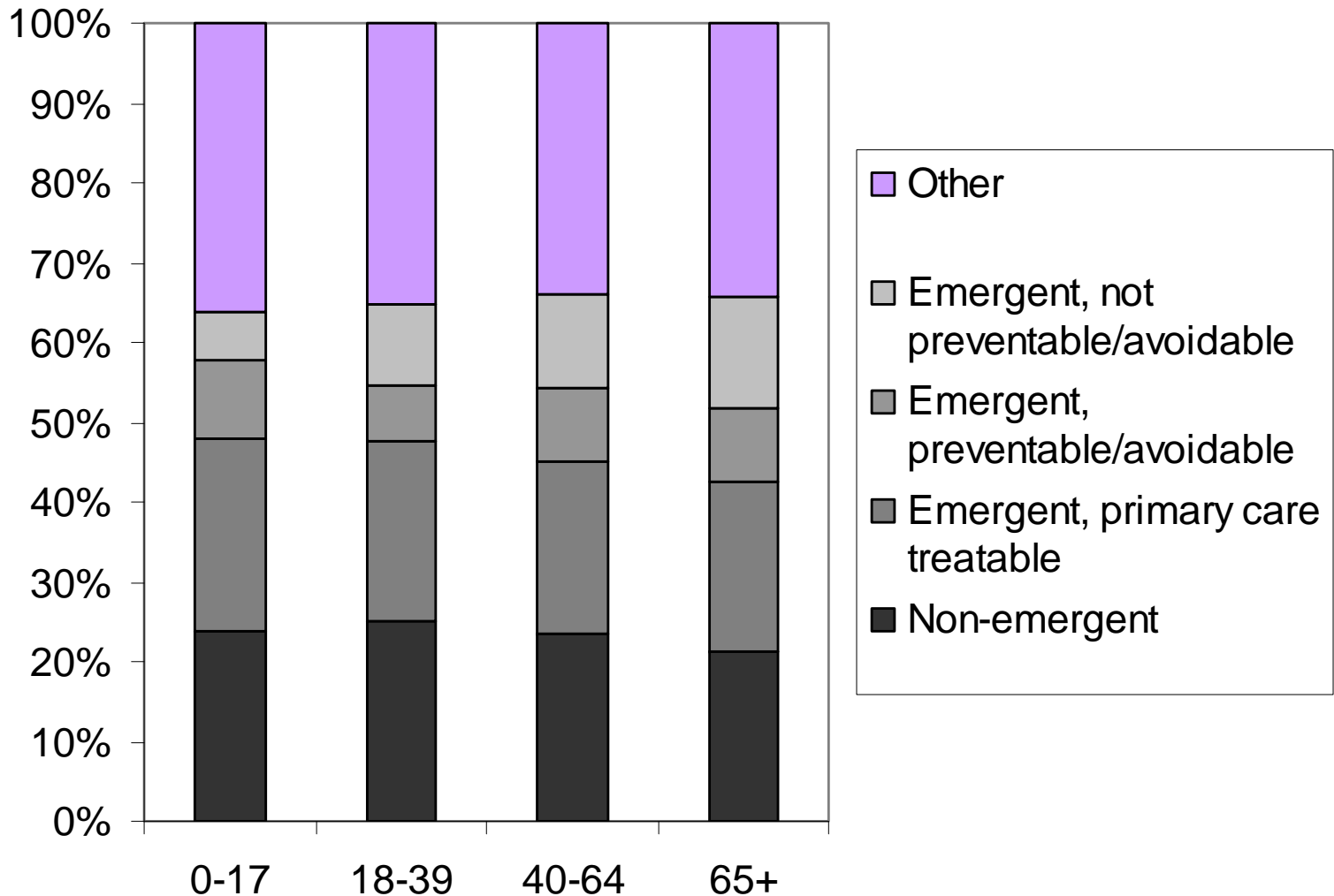


Upward Trend in Diversion Hours is Difficult to Fully Explain

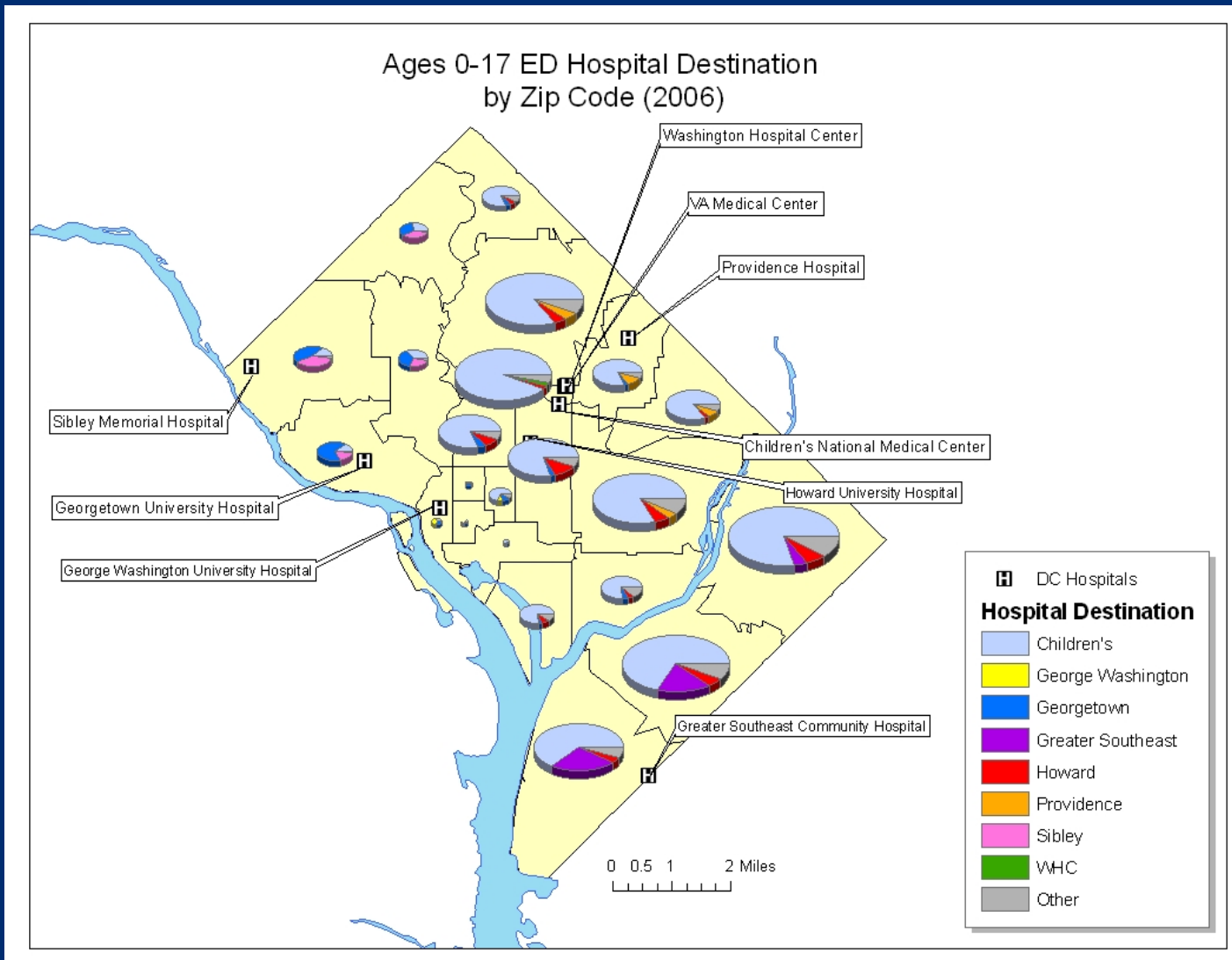
Aggregate Annual Hours on Diversion, District Hospitals, 2000-2006



More than Half of ED Visits By District Residents Are Primary Care Sensitive



Patient to Hospital Flows by Zipcode



Patients with Serious Conditions Are Sometimes Transported to Hospitals Not Best Suited to Meet Their Needs

Distribution of ED Admissions to District Hospitals for Critical Diagnoses

Hospital	Non-traumatic Neurosurgical (%)	Non-hemorrhagic stroke (%)	Emergent cardiac (%)	Major Trauma (%)
Children's	2	<1	0	14
GWU	13	12	15	16
Georgetown	12	5	2	4
Greater Southeast	2	10	6	2
Howard	7	8	23	17
Providence	11	21	14	3
Sibley	3	7	9	7
WHC	50	37	32	37
Total	100	100	100	100

Big Gaps in Knowledge Remain

- **Children's health status and access to care**
- **Insurance status**
- **Quality of EMS care**
- **Mental health/substance abuse-prevalence, use, quality**
- **Medicaid/Alliance-use and quality**

Implications

- **High rates of use of ED and rising ACS and PCS rates may reflect**
 - Inadequacies in the supply or effectiveness of primary and specialty care
 - Inappropriate care-seeking patterns
 - Supply-sensitive demand
- **The District's hospital system does not appear to be on the brink of saturation, but:**
 - Disruption at Prince George's Hospital Center could have a dramatic regional impact
 - Steps need to be taken to ensure District residents in emergency situations are taken to hospitals with the appropriate facilities to care for them

Implications (2)

- **Considerable room for improvement exists in quality of care and its measurement**
- **Addressing problems in the availability of care—primary care, specialty services, and hospital services—will need to consider:**
 - **Appropriate location**
 - **Need for new facilities**
 - **What incentives might help patients use care appropriately**
 - **What will increase provider willingness to serve populations in greatest need**

Implications (3)

- **Coordination between hospitals and FEMS could better serve District residents.**
- **The dynamics of change since 2004 need to be better understood.**

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