

Medicaid Patients' Utilization of Outpatient and Emergency Department Services for Cardiovascular and Diabetes-Related Conditions in New York State

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ABSTRACT

Background: Although New York's Medicaid program is designed to increase access to care for low-income New Yorkers, a number of barriers may limit this access. This study evaluates the Medicaid patients' use of outpatient and emergency department (ED) services for cardiovascular and diabetes-related conditions in New York State.

Methods: The study analyzed Medicaid claims data in outpatient settings (private physicians, free-standing clinics, hospital outpatient departments) or EDs in the federal fiscal year (FFY) 2013. The study population consisted of adults aged 18 to 64 years who made at least 1 visit for cardiovascular (ICD-9 codes 390-459) or diabetes (ICD-9 codes 249-250) services.

Results: Patients seeking cardiovascular and diabetes services in rural areas were more likely to obtain them from primary care physicians (52% vs 42%), other providers (8% vs 5%) such as physician assistants and nurse practitioners, and in EDs (8% vs 6%) compared to urban areas. By contrast, patients seeking these services in urban areas were more likely to obtain them from cardiologists and endocrinologists (12% vs 7%) and other medical specialists (40% vs 25%). The access to cardiovascular and diabetes services was higher in EDs than in outpatient settings for Black patients (34% vs 22%). In nearly half of rural counties, Medicaid patients received the majority of cardiovascular or diabetes services outside their county of residence.

Conclusions: There is great variation in Medicaid patient access to cardiovascular and diabetes services in New York State. Cardiologists, endocrinologists, and other specialists tend not to practice in rural areas; as a result, patients in rural areas are more likely to receive the majority of services from primary care practitioners than specialists. There are also differences in access by race/ethnicity, with Black Medicaid patients receiving more services in EDs. Future research is critical to understand impacts of these variations on health outcomes.

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BACKGROUND

Low-income New Yorkers have higher rates of diabetes, obesity, cardiovascular disease, and coronary heart disease than all other income groups¹ and tend to use EDs for primary care, particularly those on Medicaid.

The objective of this study is to evaluate Medicaid patients' use of outpatient and ED services for cardiovascular and diabetes conditions in New York State using Medicaid claims data for patients ages 18-64 during the FFY 2013.

METHODS

Data source:

New York Medicaid claims for the FFY 2013 (October 2012-September 2013).

Study population:

Patients between the ages of 18 to 64 who had at least 1 cardiovascular (ICD-9 codes 390-459) or diabetes (ICD-9 codes 249-250) service.

Service location:

Outpatient settings (physicians, free-standing clinics, or hospital outpatient departments) and EDs (visits that did not result in an inpatient stay).

RESULTS

Table 1. Distribution of Providers of Cardiovascular and Diabetes Services by Setting, Specialty, and Rural/Urban Status,² FFY 2013

County of Service	Outpatient Physician Services				Hospital ED Services
	Cardiologists and Endocrinologists	Other Medical Specialists	Primary Care Physicians	Other ^a Providers	
Rural	7.3%	25.0%	51.8%	7.9%	7.9%
Urban	11.5%	35.9%	42.1%	4.7%	5.8%
Total	10.9%	34.4%	43.5%	5.1%	6.1%

^a Other Providers includes: Physician Assistant, Nurse Practitioner, Physical Therapist, Optometrist, Podiatrist, Registered Nurse, Registered Dietitian, Occupational Therapist, Diabetes Educator.

RESULTS (cont.)

Table 2. Distribution of Patients receiving Cardiovascular and Diabetes Services by Race/Ethnicity^a and Rural/Urban Status, FFY 2013

County of Residence and Type of Settings	White	Black	Asian	Hispanic	Other ^b
Rural					
Outpatient Settings	85.4%	5.7%	0.8%	5.0%	3.0%
Hospital EDs	83.0%	7.8%	0.5%	5.9%	2.8%
Urban					
Outpatient Settings	22.8%	23.7%	15.0%	30.2%	8.3%
Hospital EDs	19.4%	38.1%	4.0%	30.8%	7.7%
Total					
Outpatient Settings	29.5%	21.7%	13.5%	27.5%	7.8%
Hospital EDs	28.4%	33.8%	3.5%	27.3%	7.0%

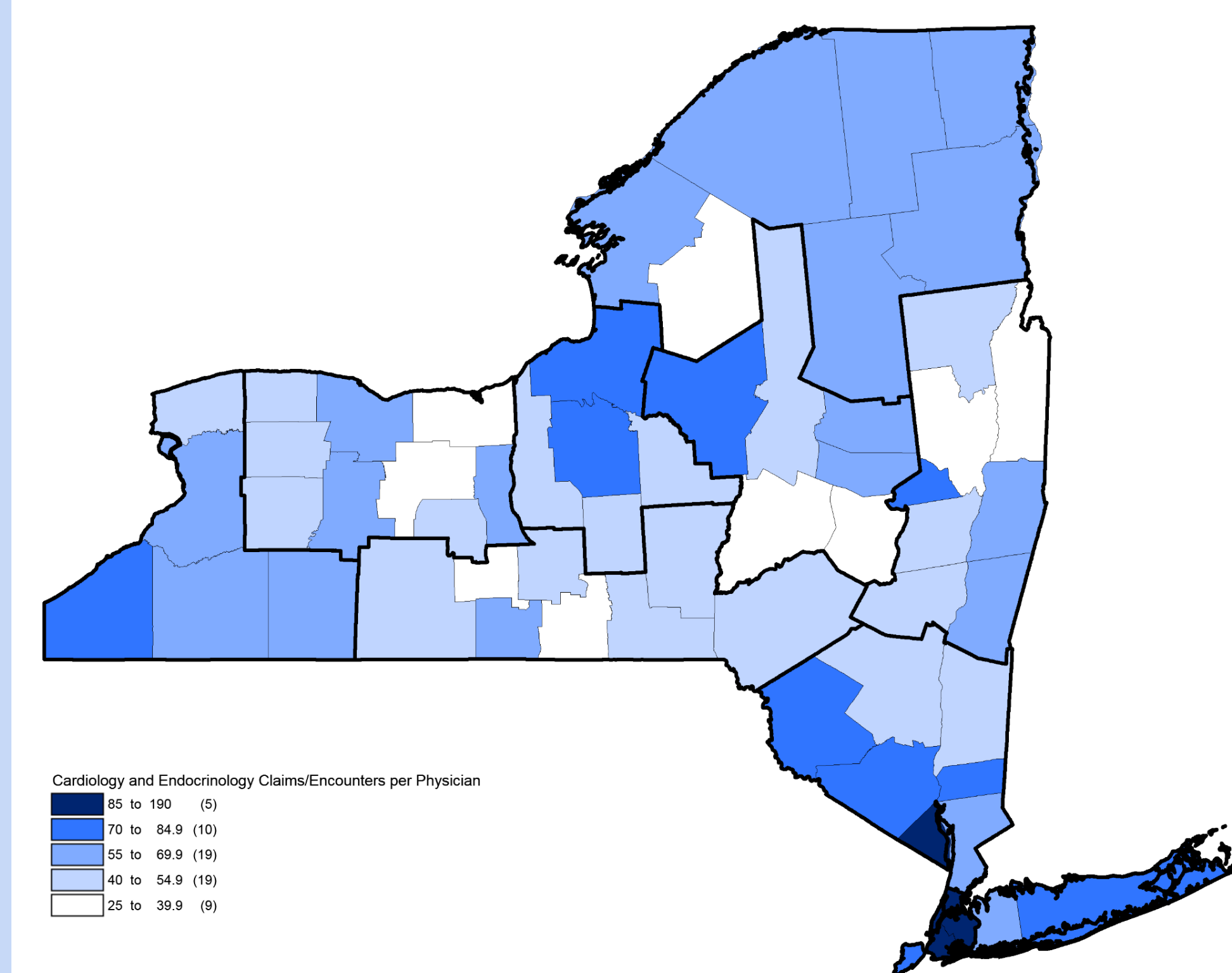
^a Hereafter, racial/ethnic categories are shortened: non-Hispanic White is referred to as White; non-Hispanic Black/African American is referred to as Black; Asian/Pacific Islander is referred to as Asian; and Hispanic/Latino is referred to as Hispanic.

^b Non-Hispanic American Indian or Alaskan Native; Multiple Races; or Unknown.

Table 3. Distribution of Counties by Patient Commuting Pattern and Rural/Urban Status, FFY 2013

County of Residence	Percent of Patient Visits for Cardiovascular and Diabetes Services in County of Residence			
	0-24.9%	25-49.9%	50-74.9%	75% Plus
Rural	5 (11.6%)	15 (34.9%)	18 (41.9%)	5 (11.6%)
Urban	0 (0.0%)	1 (5.3%)	8 (42.1%)	10 (52.6%)
Total	5 (8.1%)	16 (25.8%)	26 (41.9%)	15 (24.2%)

Figure 1. Number of Outpatient Visits for Cardiovascular and Diabetes Services per Physician by County, FFY 2013



RESULTS (cont.)

- Medicaid patients in rural areas were more likely to receive cardiovascular and diabetes services from primary care physicians compared to urban areas.
- Patients receiving services in urban areas were more likely to obtain them from cardiologists, endocrinologists, or other medical specialists.
- White and Hispanic patients were equally likely to access cardiovascular and diabetes services in outpatient settings and in EDs.
- Black patients were more likely to access services in EDs, while Asian patients were more likely to receive services in outpatient settings.
- Medicaid patients in nearly half of rural counties received the majority of services outside their county of residence.
- Counties with the highest average number of cardiovascular and diabetes visits per physician were in New York City or the lower Hudson Valley.

CONCLUSIONS

Medical specialists tend not to practice in rural areas;³ as a result, Medicaid patients in these areas are more likely to receive services from primary care practitioners than from specialists.

There are differences in access by race/ethnicity, with Medicaid Black patients receiving more services in hospital EDs. Also, patients in many rural counties travel outside their county of residence for cardiovascular and diabetes services.

Further research is critical to understand impacts of these variations on health outcomes of New Yorkers with Medicaid insurance.

REFERENCES

- 1 New York State Department of Health, Behavioral Risk Factor Surveillance System.
- 2 This definition of rural and urban is based on Ebert's Typology as outlined in Article 2, Title 2C, Section 235 of the New York State Public Health Law.
- 3 Annual New York Physician Workforce Profile, 2010 Edition. The Center for Health Workforce Studies, 2011.

Financial support for this study was provided by the New York State Department of Health.