Low-income New Yorkers have higher rates of diabetes, obesity, cardiovascular disease, and coronary heart disease than all other income groups 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**


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 240-250) 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 (cont.)**

<table>
<thead>
<tr>
<th>Table 2. Distribution of Patients receiving Cardiovascular and Diabetes Services by Race/Ethnicity and Rural/Urban Status, FFY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>County of Residence and Type of Settings</td>
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<tr>
<td>Rural, Outpatient Settings</td>
</tr>
<tr>
<td>Rural, Hospital EDs</td>
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<tr>
<td>Urban, Outpatient Settings</td>
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<tr>
<td>Urban, Hospital EDs</td>
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<tr>
<td>Total, Outpatient Settings</td>
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<td>Total, Hospital EDs</td>
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</tbody>
</table>

**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 receive 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; 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.