



Value-based success, informed by *life*.

# **Analysis of Diabetes Complications and Control**

Nascate QE Public Report

# About Nascate

Nascate is a data services and technology company that leverages unique analytics and relevant insights to help payers and providers navigate modern challenges and opportunities and achieve sustainable value-based care.

Founded in 2016, our dedicated team of healthcare experts, data scientists, and applied AI specialists are focused on understanding the interconnections among consumers, providers and health plans. Our unique perspective is driven by analyzing consumer and provider behavior over time, to develop a comprehensive understanding of the factors impacting a person's engagement with the healthcare system.

We've developed applied data science models that can graph, measure, and quantify the important relationships in healthcare that impact outcomes (provider-to-patient, and provider-to-provider). Insight into these key connections, paired with a complete 360-degree view of how members behave (utilization patterns) and providers behave (referral patterns) delivers valuable, timely intelligence that informs value-based principles like attribution, network management, and person-targeted actions.

Nascate produced this report as part of our participation in the CMS Qualified Entity Program.



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## Analysis of Diabetes Complications and Control

Public Quality Measure Report: Diabetes Short-Term Complications Admission Rate (PQI 01), Diabetes Long-Term Complications Admission Rate (PQI 03) and Uncontrolled Diabetes Admission Rate (PQI 14)

### Background

Nascate analyzed 3 Diabetes Prevention Quality Indicators (PQIs) in Iowa, South Dakota, and a subset of NY counties. PQIs are specific measures that were developed and are maintained by the Agency for Healthcare Research and Quality (AHRQ). These measures use data from hospital discharges to identify acute admissions that might have been avoided through access to high-quality outpatient care. For more information on Prevention Quality Indicators, please visit [AHRQ's website](#).

### Data and Methodology

This report uses a combination of Medicare fee-for-service healthcare claims data and commercial healthcare claims data which includes traditional Commercial, Medicare Advantage, and managed Medicaid lines of business.

Geographically, the data includes Iowa, South Dakota, and a subset of 4 New York counties<sup>1</sup>.

The metric is evaluated with the following numerator and denominator eligibility and exclusion rules:

#### Diabetes Short-Term Complications Admission Rate (PQI 01)

Admissions for a principal diagnosis of diabetes with short-term complications (ketoacidosis, hyperosmolarity, or coma) per 100,000 people, ages 18 years and older.

<b>Numerator</b>	Hospital admissions for patients, ages 18 years and older, with a principal diagnosis code for diabetes short-term complications (ketoacidosis, hyperosmolarity, or coma).
<b>Denominator</b>	Population ages 18 years and older.
<b>Exclusions</b>	Obstetric admissions and transfers from other institutions.

<sup>1</sup> Subset of NY counties: Dutchess, Orange, Sullivan, Ulster

### Diabetes Long-Term Complications Admission Rate (PQI 03)

Admissions for a principal diagnosis of diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) per 100,000 people, ages 18 years and older.

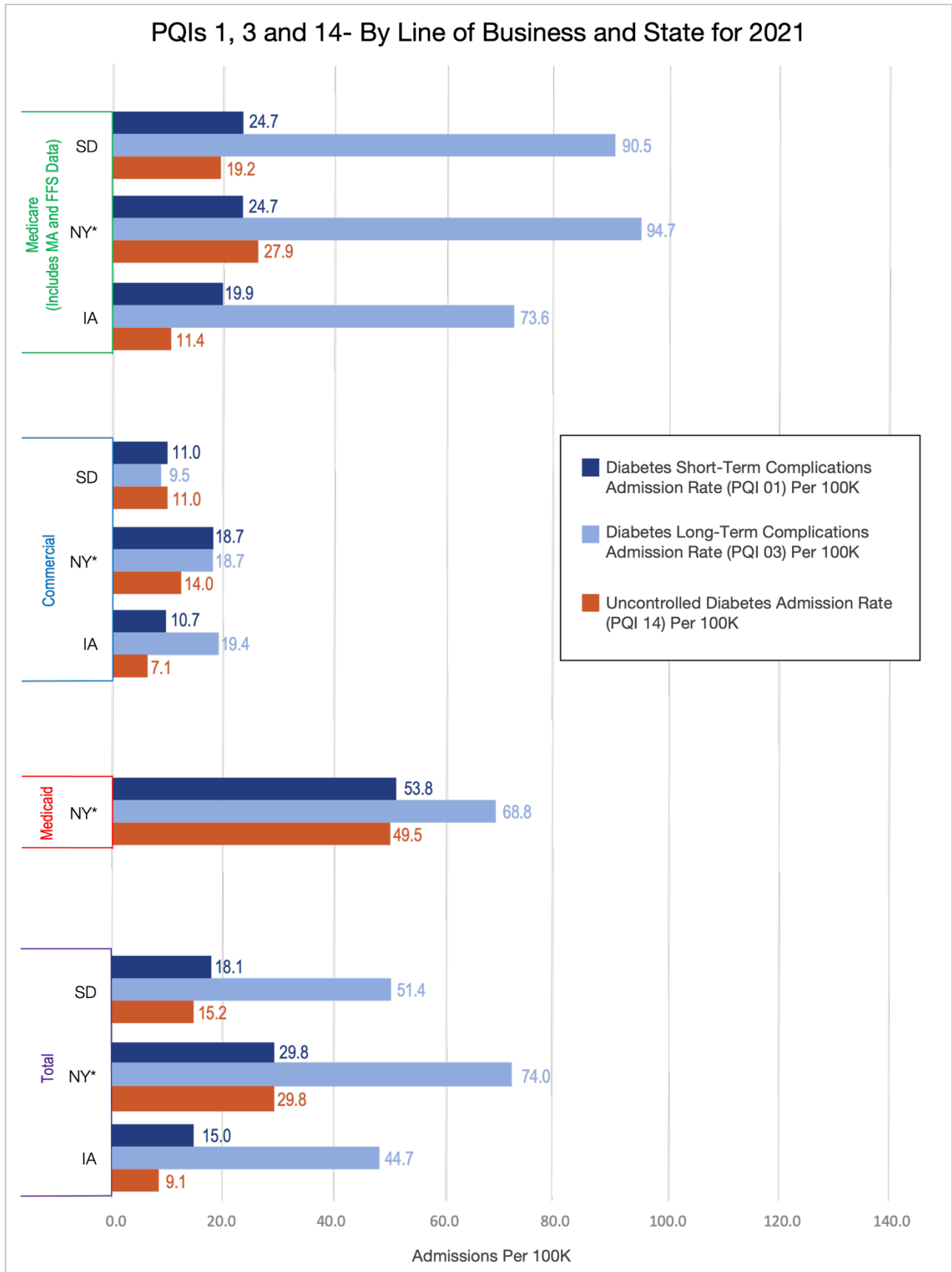
<b>Numerator</b>	Hospital admissions for patients, ages 18 years and older, with a principal diagnosis of diabetes long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified).
<b>Denominator</b>	Population ages 18 years and older.
<b>Exclusions</b>	Obstetric admissions and transfers from other institutions.

### Uncontrolled Diabetes Admission Rate (PQI 14)

Admissions for a principal diagnosis of diabetes without mention of short-term complications (ketoacidosis, hyperosmolarity, or coma) or long-term complications (renal, eye, neurological, circulatory, or other unspecified) per 100,000 people, ages 18 years and older.

<b>Numerator</b>	Discharges, for patients ages 18 years and older, with a principal ICD-9-CM diagnosis code for uncontrolled diabetes without mention of a short-term or long-term complication.
<b>Denominator</b>	Population ages 18 years and older.
<b>Exclusions</b>	Obstetric admissions and transfers from other institutions.

## Results



\* Subset of NY counties: Dutchess, Orange, Sullivan, Ulster