

# Emergency Department Care Coordination Program ACO Case Study

Carilion Clinic's Doctors Connected: ACO Reduces Avoidable  
Readmissions via Out-of-Network Care Coordination

## Executive Summary

In 2019, Doctors Connected - Carilion Clinic's Accountable Care Organization (ACO) - engaged with Virginia's Emergency Department Care Coordination (EDCC) Program to help improve care coordination for its patients.

While Carilion Clinic operates the region's only Level 1 trauma center and six other hospitals in Southwest and Western Virginia, the ACO's primary care footprint covers more than 40 locations stretching from Harrisonburg to Martinsville. As a result, patients attributed to the ACO through their primary care physicians may still receive care from other health system hospitals and emergency departments.

By accessing the EDCC, the care coordination team has seen a marked improvement in their ability to identify and reach ACO patients at a high risk of readmission when discharged from non-Carilion facilities. From December 2020 to December 2021, Carilion was able to identify 740 patients for care management using the EDCC portal. By engaging these patients at high risk for rehospitalization, Carilion's ACO can take action to reduce their risk of readmission. In 2021 alone, Carilion ACO patients discharged from a non-Carilion facility and identified to engage in transition care management using the EDCC portal had a readmission rate of 13.9%. Comparatively, patients discharging from non-Carilion hospitals with a similar readmission risk who were not engaged in the ACO's transition care program were readmitted at a rate of 21.2%.

Carilion has also leveraged the EDCC to improve awareness around high-risk patients with chronic conditions who visit emergency departments and are admitted as inpatients. This approach empowers Carilion to take real-time action to address patient barriers to care plan adherence and reduce the risk of readmission. While Carilion initially started using the EDCC portal for only ACO patients, the care coordination team's success has permitted alerts from the EDCC to be utilized for all 260,000 patients with a Carilion primary care physician

## Harnessing Improved Interoperability to Reduce Avoidable Readmissions

One area of focus for Carilion's ACO has been identifying patients discharged from an inpatient setting at high risk for readmission. Once they are identified, Carilion's care management teams contact the patient and attempt to enroll them in a 30-day transition care management program. As part of the program, the patient has regular telephonic visits with a care coordinator who works with them to improve compliance with their care plan and connect them to community resources to remove barriers to adherence to the care plan. The program has proven effective at reducing readmission for the ACO population.

From 2017 to 2020, Carilion's ACO primarily relied upon ADT feeds from its six hospitals to identify discharging patients that may be appropriate for this care management program. While this process ensured that Carilion captured most ACO patients, there was a significant blind spot - knowing when attributed patients at high risk for readmission were discharged from non-Carilion facilities in the region. Carilion did have some workflows to pick up discharges from non-Carilion facilities occasionally. Still, it was labor-intensive requiring HAAs and nurses to call other hospitals to obtain information about discharged patients.



**40**

Locations



**260k**

Patients

At the end of 2020, Carilion signed an agreement with VHI to participate in the EDCC program for its ACO population. Carilion started with its Medicare Advantage populations in December 2020 and then added its Next Generation ACO and Employee populations in April 2021. Since launching the program, Carilion has assigned more than 740 ACO patients discharged from a non-Carilion facility identified using the EDCC portal. Patients who were engaged and completed the ACO's transition care management program were readmitted at a rate of 13.9%, compared to 21.2% for similar-risk patients discharging from non-Carilion facilities.

**"The EDCC has allowed us to get real-time alerts on patients discharging from non-Carilion facilities. While we were not aware of them previously, it did not mean they weren't at high risk for readmission,"**

said Donna Littlepage, Senior Vice President, Accountable Care Strategies, Carilion Clinic.

**"The EDCC has allowed us to cast a bigger net and ensure we take appropriate interventions to help these patients with transitions of care, get connected to appropriate resources and ultimately prevent avoidable readmissions."**

### Using the EDCC to Support Patients with Chronic Conditions

In addition to using the EDCC to identify patients at risk for readmission, Carilion's care management teams have also leveraged the ability to set up alerts on subsets of the ACO population. Aside from readmission prevention, Carilion also offers care management for patients with multiple chronic conditions and those at skilled nursing facilities. These programs are designed to help the patient better manage their chronic conditions or coordinate care during and after the patient's stay at a skilled nursing facility.

Through its work with the EDCC, Carilion established a report that alerts staff when a patient in care management programs has an emergency department visit or inpatient admission at any EDCC facility.

The care coordinator can then follow up with the patient and their provider in real-time to discuss whether adjustments to the care plan are required.

The EDCC also allows skilled nursing facilities to report information on admissions and discharges. To date, reports are filed by only a small subset of the facilities within Carilion's footprint. However, Carilion is working to improve the utilization of this system to assist care management teams working with patients in skilled facilities.

**740**

ACO patients discharged from a non-Carilion facility identified using the EDCC portal.

### Patient Readmission Rate

**21.2%**

**Non-Carilion Facilities**

**13.9%**

**Carilion Facilities**

## Timely Data Improves Understanding of ACO Utilization Trends

Before signing up with the EDCC in 2020, the ACO primarily had to rely on claims data from payers to assess utilization trends. Because of the lag in claims, data can often be at least three months behind.

Once Carilion started to access the EDCC portal for the ACO populations, it was able to leverage the reports to develop operational dashboards showing real-time shifts in utilization around inpatient admissions and emergency department visits. During the COVID-19 pandemic, this real-time reporting allowed the ACO leadership team to have a clearer picture of how utilization is shifting across Carilion and non-Carilion facilities and allow more timely adjustment to initiatives or patient support programs.

## Recommendations for Improvement

As outlined in the examples above, Carilion Clinic's ACO team has found the EDCC program offered through VHI is invaluable to its mission of driving higher quality, lower-cost care for the patients and communities it serves. Carilion's ACO believes that the Commonwealth of Virginia should ensure that this resource continues to be available to health systems, providers and ACOs in the future.

Currently, the EDCC only provides admission and discharge information and occasionally the diagnoses. Including more detailed information could help improve the care management team's work with patients. This additional information could include discharge summaries, medication lists, appointment information and patient discharge instructions.

## Background

Carilion Clinic is a not-for-profit health care organization based in Roanoke, VA. Carilion operates a comprehensive network of hospitals, primary and specialty physician practices and other complementary services that provide quality care for nearly 1 million Virginians.

In 2013, Carilion Clinic created an Accountable Care Organization (ACO), Doctors Connected, and entered the Medicare Shared Savings Program (MSSP). From 2017 to 2021, Doctors Connected participated in the CMMI Next Generation ACO Innovation Model, in which the ACO was responsible for one hundred percent of the patients' medical expenditure attributed to the ACO. Between 2017 and 2021, Carilion's Next Generation ACO population included between 45,000 and 50,000 patients. When the Next Generation ACO model concluded, Carilion entered the Medicare Shared Savings Program - Enhanced Track beginning in 2022.

In addition, Carilion has numerous value-based care agreements with private payers participating in Medicare Advantage, Commercial and Managed Medicaid. Carilion also provides care coordination support through its ACO to support the more than 19,000 Carilion Clinic employees.

In 2017 Virginia General Assembly established the EDCC Program within the Virginia Department of Health (VDH) to provide a single, statewide technology solution that connects all hospital Emergency Departments in the Commonwealth with care providers across the care continuum. The EDCC Program facilitates real-time communication and collaboration among healthcare providers, clinical and care management personnel for patients receiving services in hospital EDs for the purpose of improving the quality of patient care services. VDH contracted Virginia Health Information to fulfill the requirements of this legislation. Virginia Health Information (VHI), a not-for-profit organization with nearly 30 years of experience collaborating with Virginia government agencies to administer health data collection programs and serves as the state designated Health Information Exchange (HIE). PointClickCare (formerly Collective Medical) was chosen as the EDCC Program technology partner.

