COMMONWEALTH of VIRGINIA
Department of Health
Karen Shelton, MD
State Health Commissioner
P O BOX 2448
RICHMOND, VA 23218
TTY 7-1-1 OR
1-800-828-1120

January 17, 2025

MEMORANDUM

TO: The Honorable Janet V. Kelly
Secretary of Health and Human Resources

The Honorable L. Louise Lucas
Chair, Senate Finance and Appropriations Committee

The Honorable Luke E. Torian
Chair, House Appropriations Committee

FROM: Karen Shelton, MD
State Health Commissioner, Virginia Department of Health

SUBJECT: Emergency Department Care Coordination (EDCC) Program Annual Report

This report is submitted in compliance with the 2022 Special Session I Virginia Acts of the Assembly – Item 299 (B.3), which states:

> *The department, in coordination with the ED [Emergency Department] Council, shall report annually to the Secretary of Health and Human Resources and the Chairmen of the House Appropriations and Senate Finance and Appropriations Committees on progress, including, but not limited to: (i) the participation rate of hospitals and health systems, providers and subscribing health plans; (ii) strategies for sustaining the program and methods to continue to improve care coordination; and (iii) the impact on health care utilization and quality goals such as reducing the frequency of visits by high-volume Emergency Department utilizers and avoiding duplication of health care services.*

Should you have any questions or need additional information, please feel free to contact me at (804) 864-7002.

KS/AJ
Enclosure

Annual Report:
Emergency Department Care Coordination (EDCC) Program

Year 6 (November 1, 2021 - October 31, 2022)

Virginia Health Information

Introduction

The 2017 Virginia General Assembly established the Emergency Department Care Coordination (EDCC) Program (§ 32.1-372) within the Virginia Department of Health (VDH) to provide a technology solution that connects all hospitals operating emergency departments (EDs) in the Commonwealth of Virginia. The program is meant to facilitate real-time communication and collaboration among physicians, other healthcare providers and clinical and care management personnel for patients receiving services in hospital EDs to improve the quality of patient care services. The budget language in support of the legislation required VDH and the Department of Medical Assistance Services (DMAS) to obtain Health Information Technology for Economic and Clinical Health (HITECH) Act and general funds for receipt of matching funds.

Since implementing the event notification service (ENS) technology in Virginia, emergency departments and health plans throughout the Commonwealth can share and receive real-time patient visit information directly in their electronic health record (EHR) or existing workflows. Real-time, actionable notifications triggered by analytics notify providers when a patient presents to the ED with complex needs. All Virginia EDs receive standard alert criteria, and, as of October 2022, about 22% of patients triggered an Emergency Department information exchange (EDie*)* alert. The number of patients who trigger an EDie alert has increased over time as the use of the program has grown and three new triggers were added to combat the opioid crisis and COVID-19 pandemic. The number of visits which triggered an EDie alert averaged 94,150 per month in calendar year 2022 as of November 2022.

The patients who trigger an alert are considered most at risk for an avoidable encounter in the future and often have chronic conditions that have gone untreated and/or unmanaged as illustrated in Figure 1. The Collective Platform provides notifications and a shared platform through which multiple providers can engage with that patient and collaborate on their care. The goal of the EDCC Program is to support the providers caring for these patients to ensure that they receive the right care with the right provider and at the right time.

Figure 1 - Patients with 10 or more ED visits within 12 months from June 2021 through June 2022

18,791 people — **301,774** total emergency visits

Collective Utilization Category	Visit Count in 12 Months	Number of Patients	Total ED Visits	Median ED Visits	Total Inpatient Admissions	Median Inpatient Admissions	Average Length of Stay (Days)	Percent with a Behavioral Health Diagnosis	Percent that are Suspected Homeless	Percent with Care Insight
Rising Risk	10 - 14	12,470	142,016	11	21,098	1	4.3	55.6%	0.3%	4.5%
	15 - 19	3,275	54,428	16	7,401	1	4.1	66.9%	0.6%	9.4%
High Utilization	20 - 29	1,867	43,575	23	5,201	1	3.9	74.2%	0.7%	14.2%
	30 - 49	809	29,974	36	2,672	1	3.8	84.4%	1.7%	19.5%
Super Utilization	50 - 74	222	13,164	58	893	1	3.2	85.1%	0.5%	27.9%
	75 - 99	65	5,583	86	276	2	3.6	90.8%	0.0%	43.1%
Extreme Utilization	100 +	83	13,034	137	366	1	3.9	98.8%	3.6%	38.6%
Grand Total		18,791	301,774	12	37,907	1	4.2	61.3%	0.5%	7.5%

Legislation Requirements

Specifically, § 32.1-372 defines the EDCC Program to have the following capabilities:

- **Receives real-time patient visit information from and shares such information with every hospital ED in the Commonwealth through integrations that enable receiving information from and delivering information into electronic health records systems utilized by such hospital EDs.** As of October 2022, 17 out of 21 hospital and health systems in the Commonwealth integrated the EDCC technology solution into their EHR and receive the alerts electronically. The remaining hospitals receive informational alerts via fax or printer. All hospitals share information on their patients to receive alerts, and data quality is regularly reviewed. Optionally, all hospitals can enable access to the Collective Platform portal and integrate additional notifications.

- **Requires that all participants in the Program have fully executed healthcare data exchange contracts that ensure that the secure and reliable exchange of patient information fully complies with patient privacy and security requirements of applicable state and federal laws and regulations including the Health Insurance Portability and Accountability Act (HIPAA).** To participate, every organization signs the ConnectVirginia EXCHANGE Trust Agreement (ETA) to join VHI's existing legal and trust framework.

- **Allows hospital EDs in the Commonwealth to receive real-time alerts triggered by analytics to identify patient-specific risks, to create and share care coordination plans and other care recommendations and to access other clinically beneficial information related to patients receiving services in hospital EDs in the Commonwealth.** The EDCC Program combines historical patient data with real-time clinical data, including automated feeds and manually created and shared care recommendations, to identify at-risk patients. As the program has been live since June 2018, there is now more than four years of historical Admit, Discharge and Transfer (ADT) feed data submitted by participating hospitals on their previous patients. There is also historical data from facilities in other states and the initial four-million historical ED encounters provided by Virginia hospitals.

As outlined in § 32.1-372, the EDCC Advisory Council (ED Council) is responsible for advising and overseeing the EDCC Program. The ED Council is comprised of varied stakeholders and meets bimonthly between February and October. In addition to the standard triggers, four new mental health triggers were added to the EDCC Program as of April 1, 2022:

1. History of—mental/behavioral health diagnosis
2. History of—suicidal ideation, suicide attempt and/or self harm
3. History of—opioid use disorder
4. History of—alcohol abuse

- **Provides a patient's designated managed care organization (MCO), primary care physician (PCP) and supporting clinical and care management personnel with treatment and care coordination information about a patient receiving services in a hospital ED in the Commonwealth including care plans and hospital admissions, transfers and discharges.** All six Medicaid MCOs receive information on their members or covered lives via the Collective Platform. The program launched with 882,528 Medicaid covered lives on the platform and, as of July 2022, has about 4 million Medicaid, commercial and Medicare covered lives attributed to Virginia health plans. If these participants present at the ED, the health plan can opt to receive a real-time update as well as view historical encounter data. Many MCOs have completed EHR integration and opted to receive customized daily reports with discharge and care coordination details. The EDCC Program continues to encourage PCPs and other downstream providers to onboard, which would allow them to receive information and collaborate with hospitals and health plans on shared patients. This collaboration often occurs inside the Collective Platform, but some providers prefer to communicate by phone or secure email.

- **Integrates with the Prescription Monitoring Program (PMP) and the Virginia Advance Health Care Directive Registry (ADR) to enable automated query and automatic delivery of relevant information from such sources into the existing workflow of healthcare providers in the ED.** As of October 2021, implementation with the Virginia PMP has been achieved with 11 out of 21 hospitals and health systems. The ED Council and the Department of Health Professions (DHP) continue to collaborate on mechanisms for providing PMP related information on EDie alerts. The NarxScore, currently available for the majority of EDCC connected hospitals and health systems, complements the PMP access available with these systems' integrated EHRs. In March 2022, the EDCC Program team began reaching out to health systems in Virginia to encourage them to integrate more fully with the Collective Platform in order to maintain access to PMP information within the EDCC Program and these efforts continue into 2023.

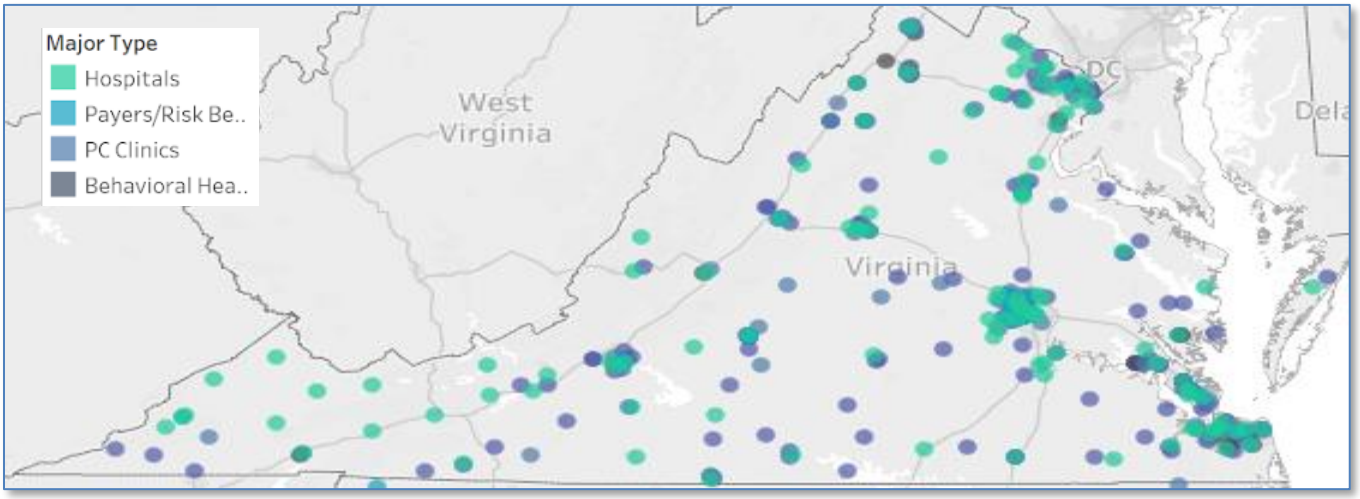
  When an advance care planning document is available in the ADR and a patient visits an ED, an *EDie alert*—a single page informational document including historical encounters and care recommendations that an ED provider can review within 60-90 seconds—is sent including a link to the document(s). As of October 2022, there were 9,270 individual active registrants with documents in the ADR.

Other Program Accomplishments

The capabilities reported above form the foundation of the EDCC Program. Now that mandated onboarding of hospital emergency departments and payers has been achieved, the EDCC Program can commit to work with providers to maximize the value of the program.

- **Interoperability and collaboration among all key stakeholders.** The Virginia EDCC Collaborative meets six times yearly to support initiatives of the ED Council and discuss creating workflows around the Collective Platform. As part of this workgroup, care managers, social workers and other representatives are encouraged to collaborate and write short, actionable insights, or guidelines, about shared, high-utilizing patients. The VA EDCC Collaborative meetings facilitate discussions among clinicians and care teams across the Commonwealth and in regional collaborative workgroups.

Figure 2 - Participating Facilities in the EDCC Program as of August 2022

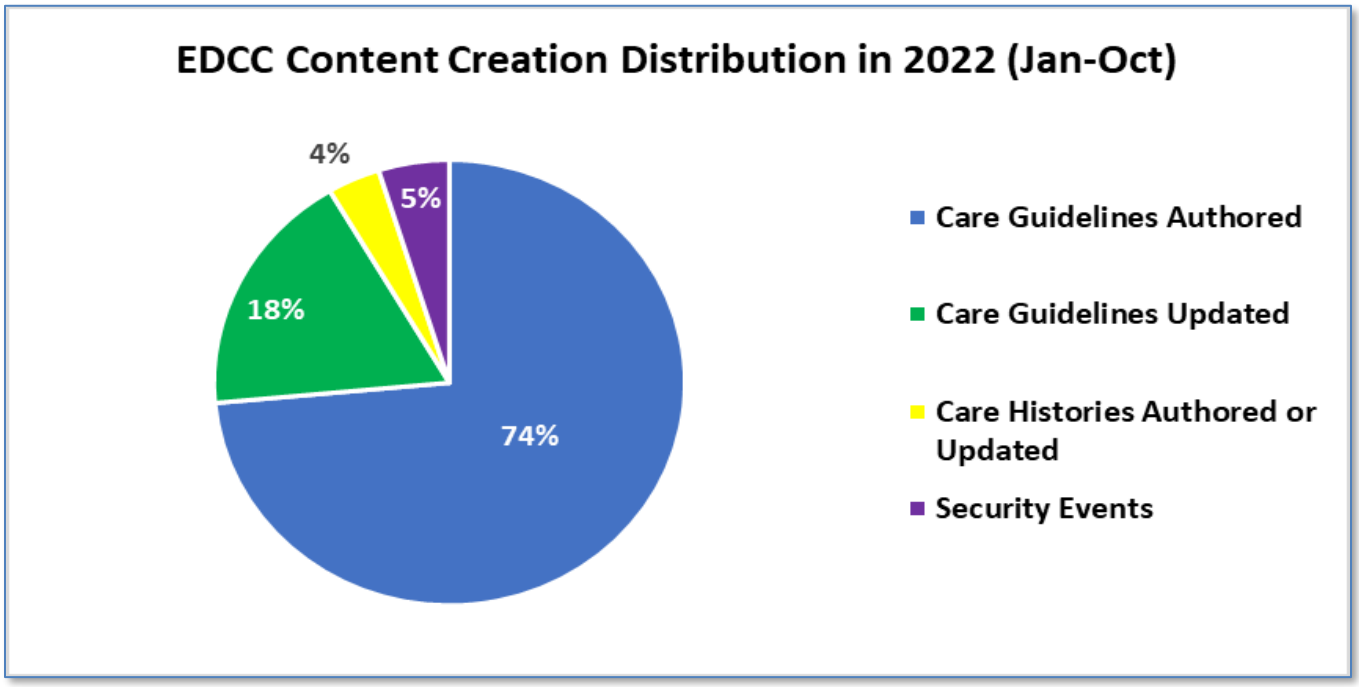


- **Balanced and broad array of stakeholders and significant stakeholder involvement in ongoing planning, defining and updating objectives, implementation, etc.** Recent objectives voiced in the EDCCP leadership groups include adding functionality around readmission reduction, behavioral health encounters and social determinants of health such as homelessness. As of June 2022, 132 Virginia skilled nursing facilities are participating in the EDCC Program, which enables tracking of readmission reduction as a wide distribution of participating facilities as illustrated in Figure 2.

- **Technology and functionality that adapts and works for all stakeholders with emphasis on enabling integration with hospitals' electronic health records (EHR) systems.** As of September 2021, 10% of Virginia health systems and hospitals established Single Sign-On (SSO) capability. This functionality allows providers to access the Collective Platform portal with their EHR login and could increase both the users of the technology as well as total actions consisting of care guidelines, care history, safety and security events and viewing patient record pages. In March 2022, the EDCC Program team shared the opportunity with Virginia hospitals and health systems to integrate with the Collective Platform to a further degree than SSO using Substitutable Medical Applications and Reusable Technologies on Fast Healthcare Interoperability Resources—SMART on FHIR—technology. SMART on FHIR technology enables a seamless integration for EHR's such as Epic or Cerner with the Collective Platform. As of October 2022, four major hospitals and health systems in Virginia are pursuing moving to a SMART on FHIR integration for a more interactive experience utilizing the EDCC Program and Collective Medical Platform.

- **Creating and sharing care coordination plans and other information.** In September 2022, 55% of health systems had active users or a provider actively logging in to the technology portal. These users authored or updated an average of over 285 care guidelines each month in 2022. The EDCC Program team continues to encourage care guidelines to be shared inside of the tool. The number of total actions has increased over time as providers add content manually. A large portion of total actions include the creation of content in the EDCC Program (as shown in Figure 3), which means Virginia healthcare providers are writing and uploading content like care guidelines, care histories and security and safety events. Care guidelines, or care insights, are designed to aid ED physicians caring for a patient in an acute setting. Adding guidelines to a patient's record view in the EDCC Program will ensure a notification, or EDie alert, will be automatically sent to any ED in Virginia or on the Collective network at which the patient presents.

Figure 3 - EDCC Content Creation



- **Focus on identified patients with patterns of high utilization.** The EDCC Program emphasizes high-utilizers or patients who often present to the ED with chronic health concerns that have been untreated or unmanaged. On average, about 4-5% of patients who visit Virginia EDs had visited at least five other EDs that year. To reduce these ED visits, more PCPs will need to onboard to the platform and more Care Insights need to be submitted within the EDCC.

- **COVID-19 Laboratory Results.** On April 4, 2020, VDH began sending daily electronic laboratory data to Collective Medical to integrate into the EDCC Program which continues to date. All laboratories and healthcare systems located in Virginia are required to report COVID-19 electronic laboratory results to VDH, which are sent via the VHI Public Health Reporting Pathway or captured via manual entry to the Virginia Electronic Disease Surveillance System (VEDSS). COVID-19 laboratory results are also received from national reference laboratories for Virginia patients and included in the EDCC Program through this data exchange. Positive and Pending COVID-19 laboratory results will display within the Collective Platform's Flags feature. Any user viewing the Collective Medical patient portal page will see information for their patients. COVID-19 Flags become automatically inactive after 6 weeks if not updated.

- **Conditions of Participation.** Through the continued partnership, hospitals participating in Virginia's EDCC Program are equipped with the tools needed to aid in compliance with the ADT notifications Conditions of Participation (CoP) included as part of the Centers for Medicare and Medicaid Services (CMS) Interoperability and Patient Access Rule. The CoP, which took effect May 1, 2021, requires hospitals to send electronic notifications to a new patient's healthcare provider upon the patient's admission, discharge or transfer. Five Virginia hospitals or health systems are utilizing the CoP functionality via the EDCC Program.

- **New Mental Health, Substance Use Disorder and Maternal Health Enhancements.** In April 2022, VHI and Collective Medical made new functionality of the EDCC Program "live" including:
    - Coordination for Mental Health: This enhancement is intended to improve care coordination for patients with mental health concerns by providing more complete whole person information to care teams. Program enhancements include:
        - New mental health criteria and notifications to identify at-risk patients in real time
        - Scheduled reports to support care management and population health efforts
        - Training and technical support for key mental health and ambulatory care teams and stakeholders
        - Patient consent management support and training for HIPAA compliance
    - Bridging Care for Substance Use Disorder: Working within the parameters of 42 CFR Part 2, the EDCC can proactively connect patients in the hospital with medication-assisted treatment (MAT) facilities for appropriate treatment.
    - Maternal Care Coordination: To improve Virginia's maternal care coordination needs, new patient cohorts and reporting was introduced to surface risk for mothers and babies using the real-time EDCC information, enhancing the ability for care teams to influence positive outcomes.

Project Status

The legislation requires the following project status updates:

1. **The participation rate of hospitals and health systems, physicians and subscribing health plans operating in the Commonwealth:**
    - 100% of EDs, which represents 21 health systems and 106 hospital emergency departments.
    - 100% of private health plans, which represents 11 major health plan parent entities. Certain ERISA plans are also choosing to participate. In 2022, there were over 4.1 million commercial, Medicare and other non-Medicaid covered lives submitted to the EDCC Program by participating health plans, accountable care organizations (ACOs) and risk bearing entities. Medicaid MCOs accounted for an additional 2.1 million lives. Health plans with fewer than 1,000 covered lives are excluded.
    - Estimated 23,110 Virginia physicians with a current, active license who are affiliated with at least one Virginia hospital.

2. **Strategies for sustaining the program and methods to continue to improve care coordination:**

- The funding structure for the EDCC Program is a 50/50 split once federal funding is exhausted. Health plans pay a fee based on monthly enrollee membership. Hospitals pay a fee based on the number of annual ED visits.
- ED Advisory Council representatives and VHI staff worked with stakeholders during the 2021 General Assembly session to not only secure HITECH/Medicaid Enterprise Systems (MES) funds but also the 10%/25% match to continue supporting the ED visits and Medicaid MCO costs of the EDCC Program. In addition, HITECH funds and the required match were also approved to support expanded DMAS access and fee for service covered lives as well as enhancements to support collaboration and coordination of mental/behavioral health, management of substance use disorders and maternal health.

3. The impact on healthcare utilization and quality goals such as reducing the frequency of visits by high-volume ED utilizers and avoiding duplication of prescriptions, imaging, testing or other healthcare services.

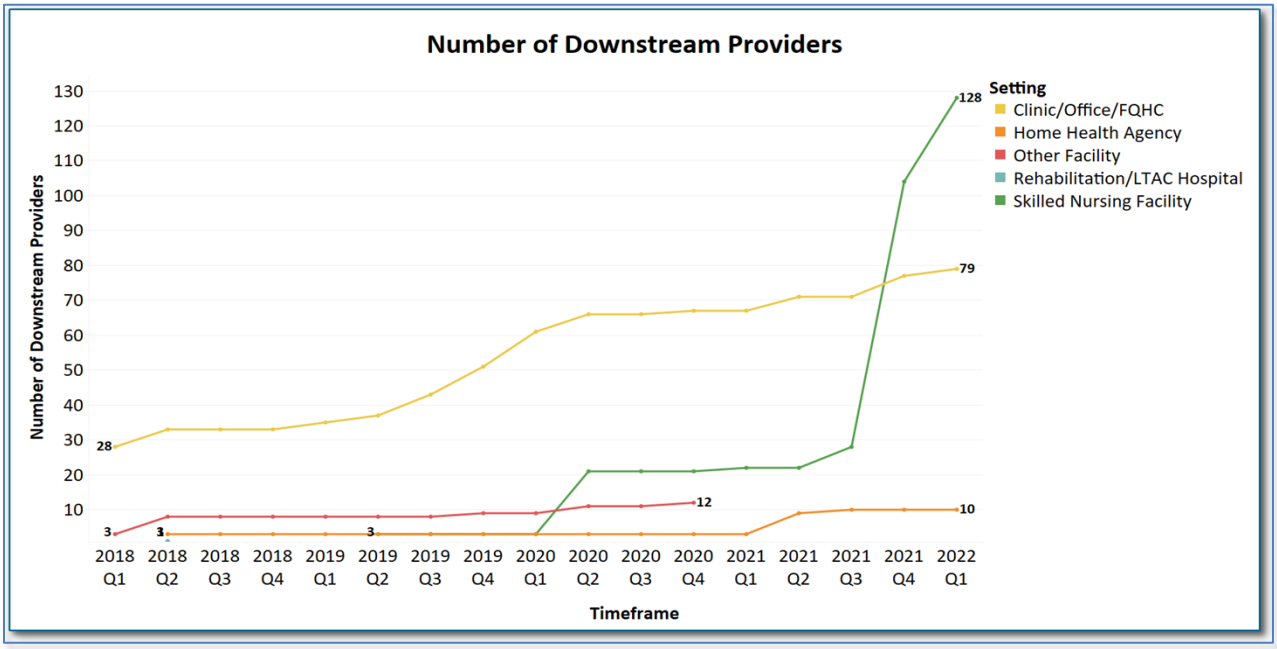
- Potential indicators that the frequency of visits by patients with high-volume ED utilization is reducing include:
    - **Anecdotal success stories.** In 2021, a Virginia Community Services Board (CSB) responded to VHI's Program Survey to share about a patient of their organization that had presented in the ED over 80 times in 2020. The care team at the CSB was able to utilize the data in the EDCC Program to provide additional targeted support that continues to decrease the number of ED visits in 2021. The patient has only presented a handful of times since January and each time it was for a valid health concern.
    - **Continued data analysis**. In 2020, the ED Council established a Metrics Workgroup comprised of a subset of ED Council members to develop measures to benchmark and track success of the EDCC Program. The workgroup agreed that each measure considered should assess levels of data quality (percentage encounters with valid diagnostic code and date), engagement (percentage ED visits with care insight, number downstream providers, percent engaged users) and outcomes (patients who visited 3 EDs within 30 days as percentage of total ED visits, percentage ED visits from patients with 5+ annual visits, readmissions as a percentage of total admissions, key metrics for ED high utilizers). VHI has established a regular de-identified data feed of all ED, outpatient and inpatient encounters from Collective, the EDCC Program technology vendor, which will be used to regularly analyze and track the approved measures. The statewide percentage of notifications that were triggered by five ED encounters within 12 months has not yet decreased from the start of the EDCC Program; however, this may be attributed to Medicaid expansion. In 2021, the EDCC Program ED Council approved nine data quality, engagement and outcome measures in order to continue to analyze the rate of these encounters and track patients with high-volume ED utilization.
- Potential indicators of avoiding duplication of prescriptions include **multiple provider episodes for opioids**. As reported by the Virginia PMP in their 2019 second quarterly report, overlapping opioid and benzodiazepine prescribing increases the risk of overdose. A 2.1% decline from January to June 2019 in percentage of days with concurrent opioid-benzodiazepine prescriptions indicates progress toward smarter, safer prescribing.

Conclusion

Since the 2021 annual report, the program has continued success as noted below:

- Implementing new Mental Health, Substance Use Disorder and Maternal Health Enhancements.
- Integrating COVID-19 laboratory data in response to the global pandemic.
- Adding Conditions of Participation functionality in partnership with Collective Medical.
- Executing ETAs and onboarding downstream providers including many with multiple locations. Figure 4 illustrates the growth of the downstream provider network from the start of the program in 2018 until quarter one 2022.
- Reaching out to add patients of the PCP and supporting clinical and care management personnel as required in the legislation.
- Supporting statewide and regional collaborative meetings and initiatives.

Figure 4 - Downstream Providers



Continued enhancements and expansions to the EDCC Program are focused on regular analysis of the quality, engagement and use of the Program, expanded integration of Virginia's PMP to join the substance use (opioid) health crisis response and ongoing recruitment of downstream healthcare providers. The continued support of the General Assembly, state agencies, healthcare providers, health insurance plans and non-profit organizations help the program advance these goals.

The EDCC Program hopes that the readers of this report will find it to be a valuable resource for understanding the initiative in Virginia. Any questions or suggestions about this report may be directed to Virginia Health Information at EDCCPsupport@vhi.org or by telephone at 804-612-8187.