Annual Report:

Emergency Department Care Coordination (EDCC) Program

Year 4 (November 1, 2019-October 31, 2020)

Virginia Department of Health
March 5, 2021

VDH VIRGINIA DEPARTMENT OF HEALTH

To protect the health and promote the well-being of all people in Virginia.

Introduction

The 2017 Virginia General Assembly established the Emergency Department Care Coordination (EDCC) Program (§ 32.1-372 of the Code of Virginia) 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. This was 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 general funds for receipt of matching funds. In fiscal year 2018, VDH leveraged the $3.9 million funding budget to contract with ConnectVirginia HIE (CVHIE) to fulfill the legislative requirements of the EDCC Program. Collective Medical (CM) was later chosen as the EDCC Program technology vendor. ConnectVirginia and Virginia Health Information (VHI) completed a statutory merger, and effective July 1, 2019, ConnectVirginia is now a program of VHI.

Since implementing the Collective Medical 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. Most Virginia EDs receive standard alert criteria, and, as of October 2019, about 22% of patients on average triggered an Emergency Department information exchange (*Edie)* alert. The number of patients who trigger an EDie alert, or notification, has increased over time as the use of the program has grown and two new triggers were added to combat the opioid crisis. The number of visits which triggered an Edie alert averaged 70,037 per month in calendar year 2020 as of November 2020.

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 unmanaged. The *Collective Platform* provides notifications and a shared platform through which multiple providers can engage with that patient and collaborate on their care. The ultimate 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.

Patients with 10 or more ED visits within 12 months from July 2019 through June 2020:

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	11,678	133,312	11	19,479	1	3.8	65.5%	0.3%	3.4%
	15 - 19	3,152	52,291	16	7,104	1	3.6	73.7%	0.4%	5.4%
High Utilization	20 - 29	1,797	41,851	23	5,130	1	3.5	81.0%	0.6%	10.2%
	30 - 49	732	27,062	36	2,887	2	3.3	87.3%	0.7%	14.8%
Super Utilization	50 - 74	207	12,315	59	947	3	2.7	89.4%	1.0%	19.8%
	75 - 99	68	5,742	82	319	3	2.9	91.2%	1.5%	23.5%
Extreme Utilization	100 +	72	9,855	129	324	2	3.9	97.2%	4.2%	36.1%
Grand Total		17,706	282,428	12	36,190	1	3.7	69.9%	0.4%	5.3%

Statutory Requirements

As of June 30, 2019, all hospitals operating EDs, Medicaid managed care organizations (MCOs), private Medicare and commercial health plans (excluding ERISA plans) in the Commonwealth were required to participate in the EDCC Program. The program continues to expand to include downstream providers including primary care providers, nursing homes, community services boards (CSBs), private behavioral health providers, federally qualified health centers (FQHCs), specialty care and other healthcare providers. Other managed care entities including include accountable care organizations and organizations that provide products or services that address the utilization of healthcare services for the purpose of managing the cost of those services participate in the program as well. Specifically, § 32.1-272 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 December 2020, 17 out of 20 hospital and health systems in the Commonwealth integrated the EDCC technology solution into their EHR. The remaining hospitals receive informational alerts via fax or printer on an average of 27% of their ED visits in November 2020. All hospitals share information on their patients in order 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).** In order to participate, every organization signs the ConnectVirginia EXCHANGE Trust Agreement (ETA) to join ConnectVirginia'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 two 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 Item 300 C of the 2020 Appropriation Act, the ED Council is responsible for advising and overseeing the EDCC Program. The ED Council is comprised of varied stakeholders and meets regularly with guidance and recommendations from the Clinical Consensus Group (CCG). As of April 2020, the majority of Virginia EDs receive notifications based on the following recommended triggers:
  1. High-Utilizers: five ED encounters within twelve months
  2. Traveling Patients: 3 different EDs visits within 90 days
  3. Patients with ED care insights manually entered into the network
  4. History of security & safety events manually entered into the network
  5. Documents from the Virginia Advance Health Care Directive Registry (ADR)
  6. Narx Score of 500 or greater for narcotics, stimulants or sedatives from Virginia's Prescription Monitoring Program
  7. Previous opioid related diagnosis (12 months)
  8. COVID-19 positive or pending lab result

- **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 October 2020, has about 3.8 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 work flow of healthcare providers in the ED.** As of October 2020, implementation with the Virginia PMP has been achieved with 11 out of 21 hospitals and health systems. SB575 passed by the 2020 Virginia General Assembly provided for the mutual exchange of information between the PMP and the EDCC Program and clarified that nothing shall prohibit the redisclosure of confidential information from the PMP or any data or reports produced by the PMP disclosed to the EDCCP to a prescriber in an electronic report generated by the EDCCP so long as the electronic report complies with relevant federal law and regulations governing privacy of health information. In addition §54.1-2525 D. states "*Information obtained from the PMP pursuant to subdivision B 6 of §32.1-372 shall become part of the patient's medical record"*. The EDCC Advisory 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. Future growth of this collaboration will continue into 2021.

  When an advance care planning document(s) is available in the ADR and a patient visits an ED, then an Emergency Department information exchange (*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 2020, there were 6,771 individual active registrants with documents in the ADR. According to a recent study, even though advance directives have been promoted by health professionals for nearly 50 years, only about a third of US adults have them.

Other Program Accomplishments

The statutorily-mandated capabilities reported above form the foundation of the EDCC Program. Now that mandated onboarding of hospital emergency departments and payers have been achieved, the EDCC Program can reflect on the intent behind the legislative language and commit to work with providers to maximize the value of the program.

- **Interoperability and collaboration among all key stakeholders.** The ED Care Recommendations Workgroup meets monthly to 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.
- **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 August 2020, twenty-two Virginia skilled nursing facilities have begun the process of onboarding to the EDCC Program, which could enable tracking of readmission reduction.

- **Technology and functionality that adapts and works for all stakeholders with emphasis on enabling integration with hospitals' electronic health records (EHR) systems.** As of December 2020, 10% of Virginia health systems and hospitals have established Single Sign-On (SSO). 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 & security events and viewing patient record pages.

- **Creating and sharing care coordination plans and other information.** In November 2020, 60% of health systems had active users or a provider actively logging in to the technology portal. These users authored or updated over 1,300 care guidelines in 2020. The EDCC Program 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 the below graph), 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.

Content Created in the EDCC Program- 2020
Insights, Care Histories, Attachments, Patient Notes, Security and Safety Events
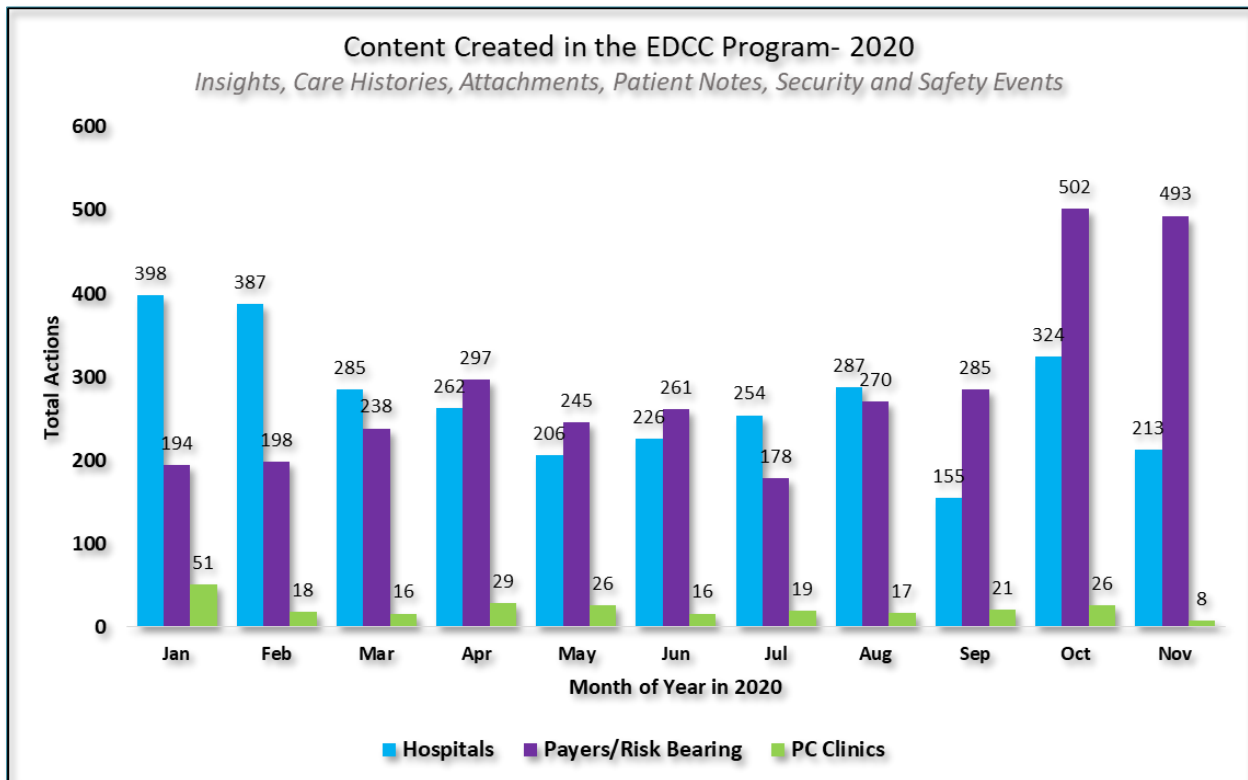
- **Focus on identified high-utilizers.** The EDCC Program emphasizes high-utilizers or patients who often present to the ED with chronic health concerns that have gone untreated or unmanaged. On average, about 14% of patients who visit Virginia EDs had visited at least 5 other EDs that year. To

reduce these ED visits by connecting these patients with PCPs, more PCPs will need to onboard to the platform to connect these patients to reduce their ED visits.
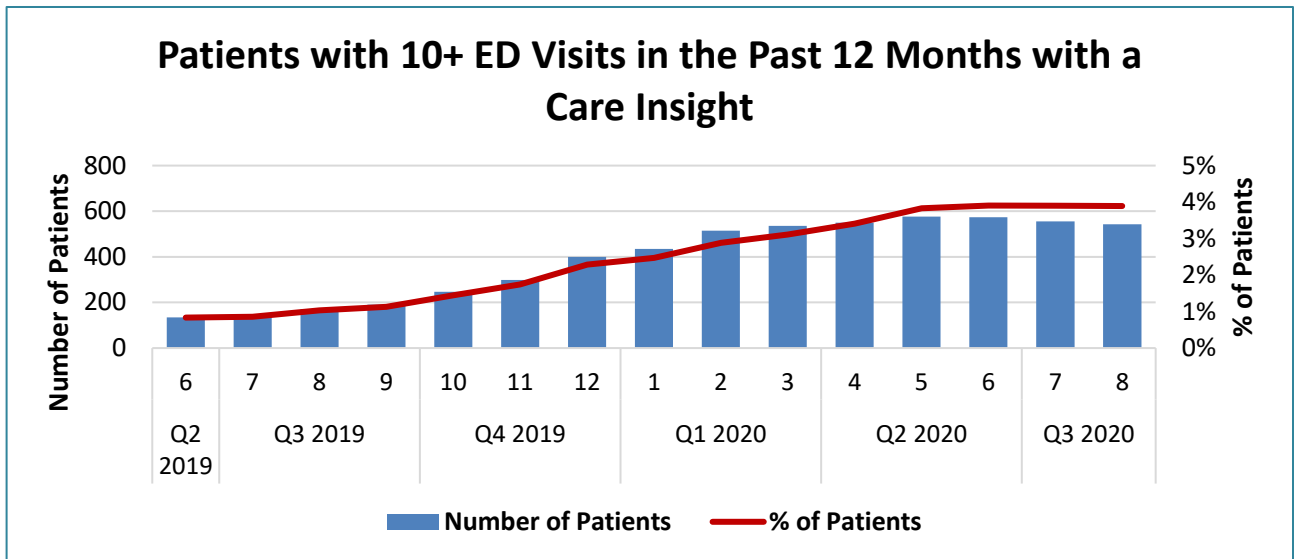
- **COVID-19 Laboratory Results.** On April 4, 2020, the Virginia Department of Health (VDH) began sending daily electronic laboratory data to Collective Medical to integrate into the EDCC Program. All laboratories and healthcare systems located in Virginia are required to report COVID-19 electronic laboratory results to VDH, which are sent via the ConnectVirginia 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, Pending, Negative and Inconclusive 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 Emergency Department Care Coordination (EDCC) Program will be equipped with the tools needed to aid in compliance with the admission, discharge and transfer (ADT) notifications Conditions of Participation (CoP) included as part of the [Centers for Medicare and Medicaid Services (CMS) Interoperability and Patient Access Rule](). The new CoP, which takes 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.

Project Status

Item 300 C of the 2020 Appropriation Act 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 October 2020, there were over 2.2 million commercial and other covered lives submitted to the EDCC Program by participating health plans (this includes a certain amount of Medicare lives that were not delineated). Health plans with fewer than 1,000 covered lives are excluded.
- Estimated 81% of Virginia physicians, which represent over 19,000 providers. An estimated 19,607 Virginia providers are affiliated with at least one Virginia hospital out of 24,193 physicians with a current license and active primary practice in Virginia.

2. **Strategies for sustaining the program and methods to continue to improve care coordination:**
   - The HITECH funding supported program operations for EDs and Medicaid MCOs for the first year of the program as anticipated. The EDCC Advisory Council, VHI staff and stakeholders continue to research additional funding sources. A Funding and Sustainability workgroup was formed as a subgroup of the EDCC Advisory Council and has been working with VHI staff as well as DMAS contacts to research sustainable funding for those entities which serve the Medicaid population (i.e. Medicaid MCOs and hospitals/health systems). 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.

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 high-volume ED utilizers is reducing include:
     - **Anecdotal success stories.** An early example has included an elderly health plan member with an extensive history of complex medical issues which resulted in chronic pain as well as a history of falls in the home. This patient had 23 ED visits in 2018 with no success in pain management which also resulted in some behavioral health issues. A health plan care coordinator was alerted and successfully contacted the member using the contact information found within the *Collective* platform. This resulted in a scheduled PCP appointment, transportation, reminder calls and a 100% decrease in ED visits. The patient is also now receiving a pharmacy review, referral for diabetes management, hearing evaluation and fall prevention lifestyle changes.
     - **Continued data analysis.** The ED Council established a Metrics Workgroup 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, engagement and outcomes. VHI has established a regular de-identified data feed of all ED, outpatient and inpatient encounters from Collective, the EDCC Program technology vendor, that will be used to regularly analyze and track the approved measures. The statewide percentage of notifications that were triggered by 5 ED encounters within 12 months has not yet decreased from the start of the EDCC Program; however, this may be attributed to Medicaid expansion. The EDCC Program will continue to analyze the rate of these encounters and track high-volume ED utilizers.
   - Potential indicators of avoiding duplication of prescriptions include:

o **Multiple provider episodes for opioids.** As reported by the Virginia PMP in their 2019 q2 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.

Closing Remarks

Since the November 1, 2019, annual report, the program has continued success as noted below:
- 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 4 managed care entities, 20 skilled nursing facilities and 15 downstream providers including many with multiple locations.
- Reaching out to add patients of the primary care physician (PCP) and supporting clinical and care management personnel as required in the legislation.

Continued enhancements and expansions to the EDCC Program are focused on regular analysis on 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 info@vhi.org or by telephone at 804-643-5573.