

Annual Report: Emergency Department Care Coordination (EDCC) Program

Year 3 (November 1, 2018-October 31, 2019)

Virginia Department of Health
November 1, 2019



*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) 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 done 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 entered into a \$3.9 million 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.

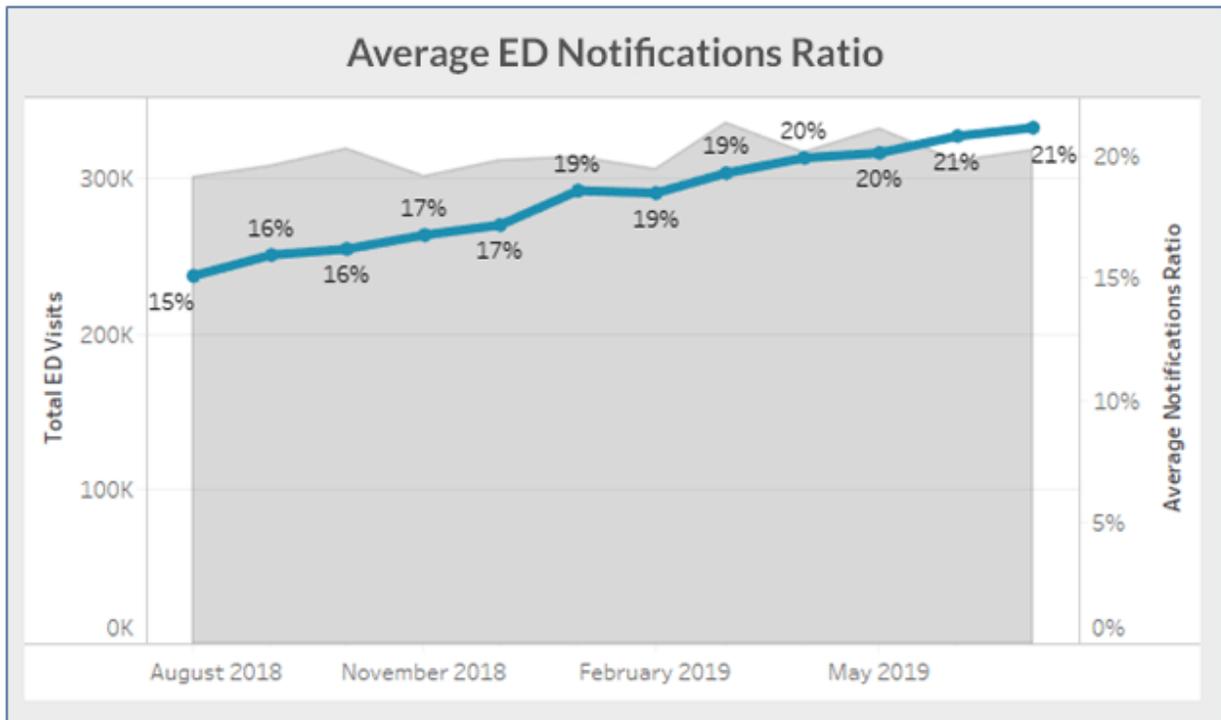
Since implementing the *Collective Platform*¹ technology (formerly called *PreManage*) in Virginia, emergency departments and health plans throughout the Commonwealth can now share and receive real-time patient visit information directly in their electronic health record (EHR) or existing workflows. Real-time, actionable notifications, triggered by analytics, notify providers when a patient presents to the ED with complex needs. As of October 2019, most Virginia EDs receive standard alert criteria, and about 20% of patients on average trigger an *EDie*² alert.

¹ Platform includes a shared portal website for collaboration and optional notification integration with a focus on the ED for providers across the care continuum. <https://collectivemedical.com/purpose/>

² Emergency Department information exchange – the technology in the ED/hospital (includes *EDie* alerts and *Collective EDie* portal). <https://collectivemedical.com/hospitals-health-systems/>

(Figure 1) 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.

Figure 1



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, at the right time and at the right price.

Legislation Requirements

As of June 30, 2019, all hospitals operating EDs, Medicaid managed care organizations (MCOs), Medicare health plans and commercial plans, excluding ERISA plans, in the Commonwealth are

participating in the EDCC Program as per the budget language in support of the legislation.

Additionally, the program is expanding to include downstream providers³ and other managed care entities⁴. Specifically, the legislation 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 August 2019, 19 out of 21 hospital and health systems in the Commonwealth integrated the EDCC technology solution into their EHR. The remaining 2 receive informational alerts via fax or print-outs on an average of 20% of their ED visits. All hospitals share information on their patients in order to receive alerts, and data quality review has started. 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. In July 2019, organization-

³ Downstream providers include: primary care providers, nursing homes, community services boards (CSBs), private behavioral health providers, federally qualified health centers (FQHCs), specialty care and other healthcare providers.

⁴ Managed care entities include accountable care organizations and other organizations that provide products or services that address the utilization of healthcare services for the purpose of managing the cost of those services.

specific versions of the ETA were created to enable the onboarding of downstream providers and managed care entities.

- **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 historical⁵ patient data with real-time clinical data, including automated feeds and manually created and shared care recommendations, to identify at-risk patients. Identified visits of interest, or at-risk patients meeting specified risk criteria, are determined by the EDCC Advisory Council⁶ (ED Council). As of September 2019, the majority of Virginia EDs receive notifications based on the following recommended seven 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)

⁵ As the program has been live since June 2018, there is now more than one year 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 referenced in the 2018 EDCC Program Annual Report. <https://rga.lis.virginia.gov/Published/2019/RD63/PDF>

⁶As outlined in the 2017 Budget Amendment, the ED Council is responsible for advising and overseeing the EDCC Program. The ED Council is comprised of varied stakeholders and continues to meet regularly with guidance and recommendations from the Clinical Consensus Group (CCG).

6. Risk scores of 500⁷ or greater from Virginia's Prescription Monitoring Program
 7. Previous opioid-related diagnosis (12 months).
- **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 are receiving information on their members, or covered lives⁸, via the *Collective Platform* portal. 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, especially hospital system affiliated ambulatory networks, and other downstream providers to onboard on an optional basis, 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**

⁷ A Narx Score of 500 or greater for either narcotics, stimulants or sedatives (excludes the Overdose Risk Score). To read more about Narx Scores, please visit Virginia's PMP resources about the [NarxCare Platform Appriss](#).

<https://www.dhp.virginia.gov/PractitionerResources/PrescriptionMonitoringProgram/PublicResources/EducationToolkit/#Appriss>

⁸The program launched with 882,528 Medicaid covered lives loaded on the platform and as of July 2019 has about 3.5 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. Prior to the EDCC, Medicaid MCOs may not have received this information for up to 60 days. Now, health plans such as Medicaid MCOs can be informed in real-time, right when a patient is admitted to a hospital. This allows for on-site intervention and coordination of care at an interdisciplinary level.

automatic delivery of relevant information from such sources into the existing work flow of healthcare providers in the ED. When an advance care planning document(s) is available in the ADR and a patient visits an ED, then an *EDie alert*⁹ is sent, which includes a link to the document(s). There are currently 5,432 individual active registrants with documents in the ADR. As of July 2019, implementation with the Virginia PMP has been achieved with 10 out of 21 hospitals and health systems. The EDCC Program is working closely with the Virginia Department of Health Professions¹⁰ (DHP) to encourage integration and expand functionality.

Other Program Accomplishments

The previously-mentioned legislated capabilities formed the foundation of the EDCC Program. Now that onboarding deadlines have been achieved, the EDCC Program can further reflect on the intent behind the legislative language and commit to work with providers to maximize the value of the program. Below are updates on the goals of the original 2016 workgroup:

- **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.

⁹ Emergency Department information exchange. A single page informational document including historical encounters and care recommendations that an ED provider can review within 60-90 seconds.

¹⁰ The Virginia Department of Health Professions manages the Virginia PMP, with their vendor Appriss Health. If the hospital is integrated and fully implemented with Appriss, then the NarxScore trigger and information will be enabled in EDie alerts.

<https://www.dhp.virginia.gov/PractitionerResources/PrescriptionMonitoringProgram/PublicResources/EducationToolkit/#Appriss>

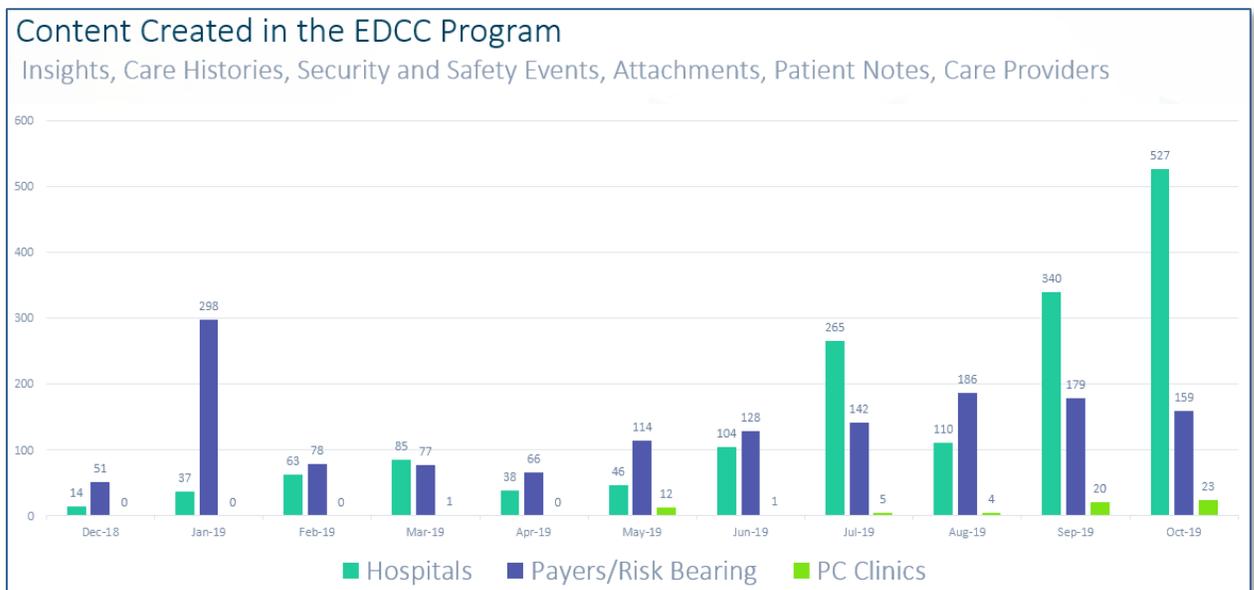
- **Balanced and broad array of stakeholders and significant stakeholder involvement in ongoing planning, defining and updating objectives, implementation, etc.** Recent objectives voiced in the EDCCP leadership groups include adding functionality around readmission reduction, behavioral health encounters and social determinants of health such as homelessness. Seven percent of Virginia nursing homes have begun the process of onboarding to the EDCC Program, which would 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 July 2019, five percent 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 actions¹¹.
- **Creating and sharing care coordination plans and other information.** In July 2019, 57% of health systems had active users or a provider actively logging in to the technology portal. These users authored 61 care guidelines, compared to only 6 in 2018. The EDCC Program will continue to encourage care guidelines to be shared inside of the tool. The number of total actions have increased over time as providers add content manually. A large portion of total actions include the creation of content in the *Collective Platform*, which means Virginia healthcare providers are writing and uploading content

¹¹ Total actions consist of manually adding care guidelines, care history, safety & security events and viewing patient record pages.

like care guidelines, care histories, and security & safety events. (Figure 2) Care guidelines, or care insights, are designed to aid ED physicians caring for a patient in an acute situation.

Adding guidelines to a patient 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 2



- 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 Primary Care Physicians (PCPs), more PCPs have to onboard to the platform.

- **Virginia PMP integration.** Ten of Virginia's 21 hospitals and health systems have already implemented PMP. The EDCC Program and PMP hope to onboard the remaining 50% onto the PMP technology and associated EDCC Program integration. Current Virginia law restricts the sharing of the full PMP report, which includes historical prescription fill data and prescribers, with prescribers and dispensers. The potential for working with stakeholders to support a statutory change may be considered.
- **Virginia ADR integration.** In July 2019, 74 notifications were due to an advance care planning document from the ADR, up from 48 in August 2018. The potential for working with stakeholders to increase the documents in the platform including additional advance care planning documents and additional registries is being considered.

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 hospitals.¹²
- 100% of health plans, which represents 11¹³ major health plan parent entities.

¹² Difference in ED count compared to last year's report is based on VDH methodology. Please note the EDCC Program is ED-centric. The 106 facilities are Emergency Departments, either hospital EDs or freestanding EDs. To provide clarity, 106 represents the number of ED campuses, which are licensed to hospital campuses. While not required to participate, there are about 32 hospital campuses without EDs (e.g. long term, rehabilitation, children's, psych) that are not yet connected. Therefore, 77% of total of total Virginia hospitals are participating (106/138).

¹³ Certain ERISA plans are also choosing to participate. In July 2019, there were about 1.8 million commercial covered lives submitted to the EDCC Program by participating health plans (this includes a certain amount of Medicare lives that were not delineated). The SCC BOI reports 1,846,778 commercial covered lives of health plans domiciled in Virginia in 2018. Health plans with fewer than 1,000 covered lives are excluded.

- Estimated 75% of Virginia physicians, which represent over 17,000 providers.¹⁴

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. VDH and DMAS continue to research additional funding sources such as additional HITECH Act funds. The funding¹⁵ structure for the EDCC Program is a 50/50 split between hospitals and health care plans once HITECH funding is used. Health plans pay a fee based on monthly enrollee membership. Hospitals pay a fee based on the number of annual ED visits. The funding structure will be reevaluated before June 2021.

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 very complex medical issues which result 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

¹⁴ An estimated 17,302 Virginia providers are affiliated with at least 1 Virginia hospital out of 23,149 physicians with a current license and active primary practice in Virginia.

¹⁵ 2017 EDCC Program Sustainability Plan: <https://www.connectvirginia.org/wp-content/uploads/2018/05/Attachment-3-2017-ED-Care-Coordination-Sustainability-Plan.pdf>

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 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:
 - **Multiple provider episodes for opioids.** As reported by the Virginia PMP¹⁶, 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 November 1, 2018, annual report, the EDCC program demonstrated success by:

- Executing ETAs and connecting with the state employee health plan, all Medicare plans operating in the Commonwealth and all commercial plans operating in the Commonwealth, excluding ERISA plans, as required in the legislation by June 30, 2019.

¹⁶ Quarterly Report, 2019 Q2, April 1-June 30, 2019:
https://www.dhp.virginia.gov/media/dhpweb/docs/pmp/reports/quarterly_2019Q2.pdf

- Initiating outreach to add patients of PCPs and supporting clinical and care management personnel, as required in the legislation.

Upcoming enhancements and expansions to the EDCC Program are especially focused on: onboarding tasks, expanded integration of data sources like 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.