# 2018 Health Information Needs Workgroup

## Virginia Health Information's

## Report to the State Health Commissioner



**November 2018**

VIRGINIA HEALTH INFORMATION
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## I. Background and Purpose of Workgroup

At the direction of the State Health Commissioner, Virginia Health Information (VHI) established a multi-stakeholder workgroup to study and make recommendations for the ongoing needs for Virginia healthcare information to support healthcare reform. In § 32.1-276.9:1, specific mention is made to the development and operation of the All Payer Claims Database (APCD), the Virginia Health Information Exchange (ConnectVirginia) and any other health reform initiatives. As required VHI established the workgroup as outlined in the law and began efforts to meet the specific requirements of § 32.1-276.9:1 as outlined below:

**§ 32.1-276.9:1. Health information needs related to reform; work group.**

A. The Commissioner shall direct the nonprofit organization to establish a work group to study continuing health information needs and to develop recommendations for design, development and operation of systems and strategies to meet those needs. The work group shall include representatives of the Department of Health, the Department of Medical Assistance Services, the Department of Health Professions, the State Corporation Commission's Bureau of Insurance, the Virginia Health Reform Initiative, the Virginia Hospital and Healthcare Association, the Virginia Association of Health Plans, the Medical Society of Virginia, healthcare providers and other stakeholders and shall:

1. Identify various health information needs related to implementation of healthcare reform initiatives, including those associated with development and operation of an all-payer claims database, the Virginia Health Information Exchange, the Virginia Health Benefit Exchange and any other health reform initiatives. In doing so, the work group shall identify the clinical and paid claims information required and the purposes for which such information will be used; and

2. Identify opportunities for maximizing efficiency and effectiveness of health information systems, reducing duplication of effort related to collection of health information and minimizing costs and risks associated with collection and use of health information.

B. The Commissioner shall report on activities, findings and recommendations of the work group annually to the Governor and the General Assembly no later than December 1 of each year, beginning in 2014.

## II. Scope of Workgroup Mission Statement

During 2018, the mission and vision of the workgroup was leveraged for expansion of reporting from the Virginia APCD, focused reporting for consumers, providers, policymakers and other stakeholders. Details following Sections III-V.

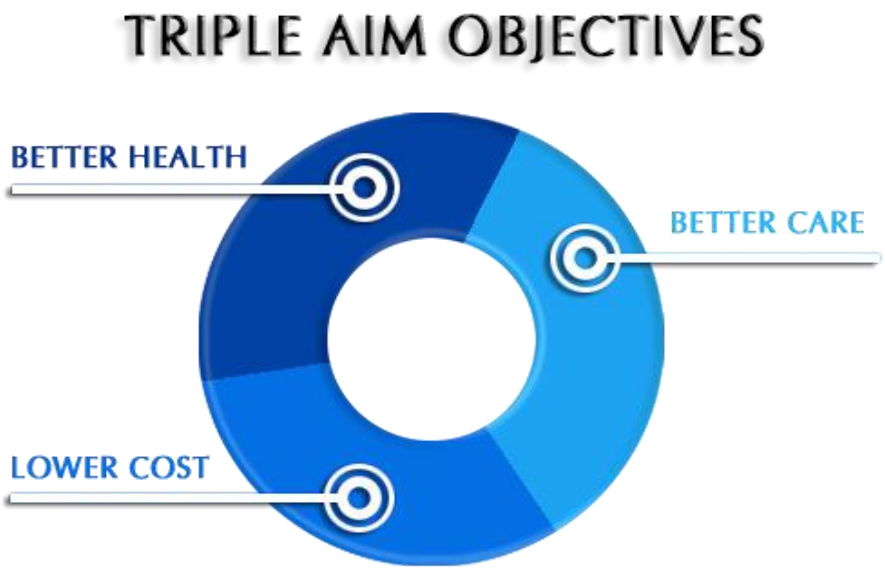
## Health Information Needs Workgroup
## Mission Statement

To ensure that the Commonwealth's health information data collections are designed most efficiently and effectively to assist all stakeholders in achieving the Triple Aim of better health, better care and lower costs for Virginians.

To fulfill this mission the workgroup will:

- Identify various health information needs related to implementation of healthcare reform initiatives, including those associated with development and operation of an all-payer claims database, the ConnectVirginia Health Information Exchange and any other health reform initiatives.
- Undertake an inventory of the Commonwealth's health information reporting programs and develop recommendations to ensure that these systems all work in concert to support the Triple Aim. We will also identify redundancies or outdated collection systems that can be eliminated, streamlined or otherwise modified to make sure that we are maximizing the efficiency of both the public and private sector.

A key aspect of the Mission Statement is viewing the workgroup's efforts and recommendations through the lens of the nationally adopted *Triple Aim of better health, better care and lower cost*.




The mission further encompasses the tasks required from the workgroup in a straightforward manner as a tool to ensure the requirements of § 32.1-276.9:1 are met.

# III. Virginia's All Payer Claims Database

Virginia's APCD is a resource for actionable information to employers, insurers, providers, public health practitioners, health policymakers and consumers. Information from the APCD is supporting the Triple Aim of better health, better care and lower costs.

Across the nation and in Virginia, most information about healthcare delivery is limited to a doctor, hospital or health plan, resulting in a narrow view of healthcare. In contrast, Virginia's APCD includes paid healthcare claims from commercial health insurance companies, the Department of Medical Assistance Services (DMAS) and other government programs in Virginia. Virginia's APCD is structured to provide the data and analytic tools for a more complete picture of healthcare delivery in Virginia. APCD information is secure and private.

A system-wide view of healthcare will facilitate data-driven, evidence-based improvements in access, quality and cost of healthcare and to promote and improve public health through the understanding of healthcare expenditure patterns and operation and performance of the healthcare system.

The Virginia APCD exists under the authority of the Virginia Department of Health (VDH) through legislation passed by the Virginia General Assembly in 2012. VDH contracts with VHI to implement the APCD to be consistent with the law and in collaboration with healthcare stakeholders.

Virginia's APCD is a voluntary program with participation committed by Virginia's major health insurance companies. Funding of $5.5 million for the second operations cycle began on July 1, 2015, and will continue through June 30, 2019, included 40% from participating health insurance companies, 40% from the Virginia Hospital and Healthcare Association and 20% from Virginia Health Information.

## A. 2018 Accomplishments and Current Status

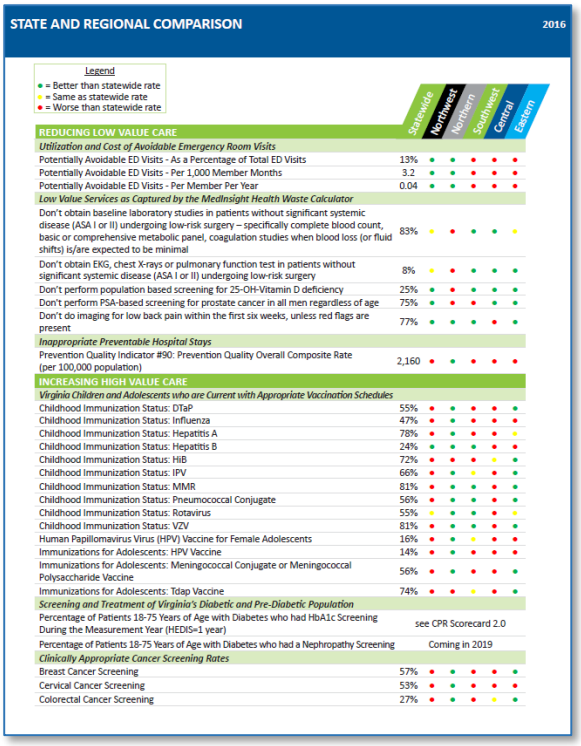
### Understanding Virginia's Health

The APCD presents significant opportunity to better understand the health of all Virginians. With APCD data spanning from 2011 through 2016, Virginia now has a much clearer picture of where dollars were spent, the health of the population and the quality of care provided.

Throughout 2018 VHI has supported the Virginia Center for Health Innovation (VCHI) in the development of their Health Value Dashboard initiative. This collaboration includes reporting on statewide and regional metrics from the APCD that seek to measure and improve the value of care provided in the Commonwealth. VHI and VCHI also created similar value dashboards on a smaller scale for several Federally Qualified Health Centers (FQHCs). Finally, VHI will be providing data on nationally endorsed measures of diabetes care management from the Virginia APCD to VCHI for its strategic planning around diabetic improvement initiatives.

## Low-Value Care

VDH is one of the largest users of Virginia APCD data. In 2018 several VDH epidemiologists successfully utilized the APCD to calculate rates of antibiotic prescriptions for patients immediately following a diagnosis for an uncomplicated Upper Respiratory Infection (URI), a practice that the Centers for Disease Control and Prevention (CDC) has deemed to be potentially harmful to patients in some cases. These rates were calculated at a regional level and shared in a letter with all healthcare providers in each region as a reminder to apply increased scrutiny towards prescribing antibiotics for uncomplicated URIs in the future.



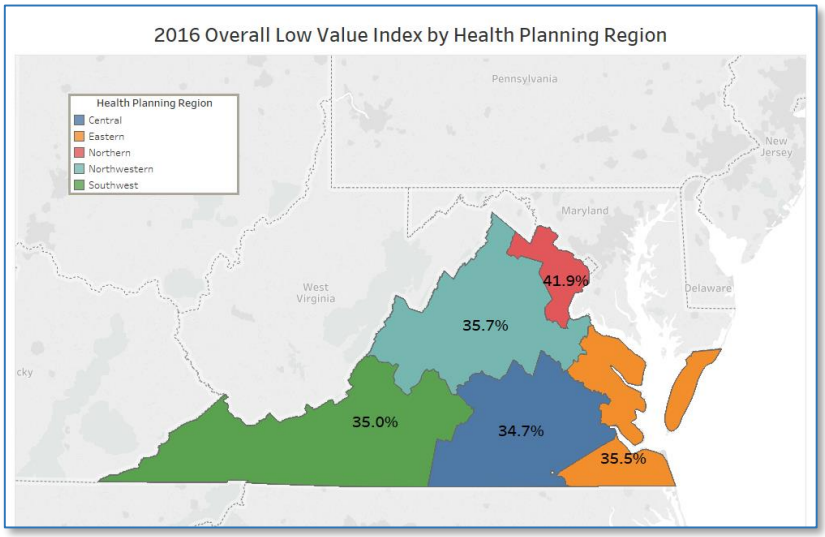
STATE AND REGIONAL COMPARISON 2016

Legend
● = Better than statewide rate
● = Same as statewide rate
● = Worse than statewide rate

| | Statewide | Northwest | Northern | Southwest | Central | Eastern |
|---|---|---|---|---|---|---|
| **REDUCING LOW VALUE CARE** | | | | | | |
| *Utilization and Cost of Avoidable Emergency Room Visits* | | | | | | |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 13% | ● | ● | ● | ● | ● |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 3.2 | ● | ● | ● | ● | ● |
| Potentially Avoidable ED Visits - Per Member Per Year | 0.04 | ● | ● | ● | ● | ● |
| *Low Value Services as Captured by the MedInsight Health Waste Calculator* | | | | | | |
| Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal | 83% | ● | ● | ● | ● | ● |
| Don't obtain EKG, chest X-rays or pulmonary function test in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery | 8% | ● | ● | ● | ● | ● |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 25% | ● | ● | ● | ● | ● |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 75% | ● | ● | ● | ● | ● |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 77% | ● | ● | ● | ● | ● |
| *Inappropriate Preventable Hospital Stays* | | | | | | |
| Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population) | 2,160 | ● | ● | ● | ● | ● |
| **INCREASING HIGH VALUE CARE** | | | | | | |
| *Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules* | | | | | | |
| Childhood Immunization Status: DTaP | 55% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: Influenza | 47% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: Hepatitis A | 78% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: Hepatitis B | 24% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: HiB | 72% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: IPV | 66% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: MMR | 81% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: Pneumococcal Conjugate | 56% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: Rotavirus | 55% | ● | ● | ● | ● | ● |
| Childhood Immunization Status: VZV | 81% | ● | ● | ● | ● | ● |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 16% | ● | ● | ● | ● | ● |
| Immunizations for Adolescents: HPV Vaccine | 14% | ● | ● | ● | ● | ● |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 56% | ● | ● | ● | ● | ● |
| Immunizations for Adolescents: Tdap Vaccine | 74% | ● | ● | ● | ● | ● |
| *Screening and Treatment of Virginia's Diabetic and Pre-Diabetic Population* | | | | | | |
| Percentage of Patients 18-75 Years of Age with Diabetes who had HbA1c Screening During the Measurement Year (HEDIS=1 year) | see CPR Scorecard 2.0 | | | | | |
| Percentage of Patients 18-75 Years of Age with Diabetes who had a Nephropathy Screening | Coming in 2019 | | | | | |
| *Clinically Appropriate Cancer Screening Rates* | | | | | | |
| Breast Cancer Screening | 57% | ● | ● | ● | ● | ● |
| Cervical Cancer Screening | 53% | ● | ● | ● | ● | ● |
| Colorectal Cancer Screening | 27% | ● | ● | ● | ● | ● |

Choosing Wisely is an initiative by the American Board of Internal Medicine Foundation to reduce unnecessary healthcare tests. Physicians from dozens of national medical specialties have worked to identify services that can often be avoided and the financial impact of this unnecessary care.

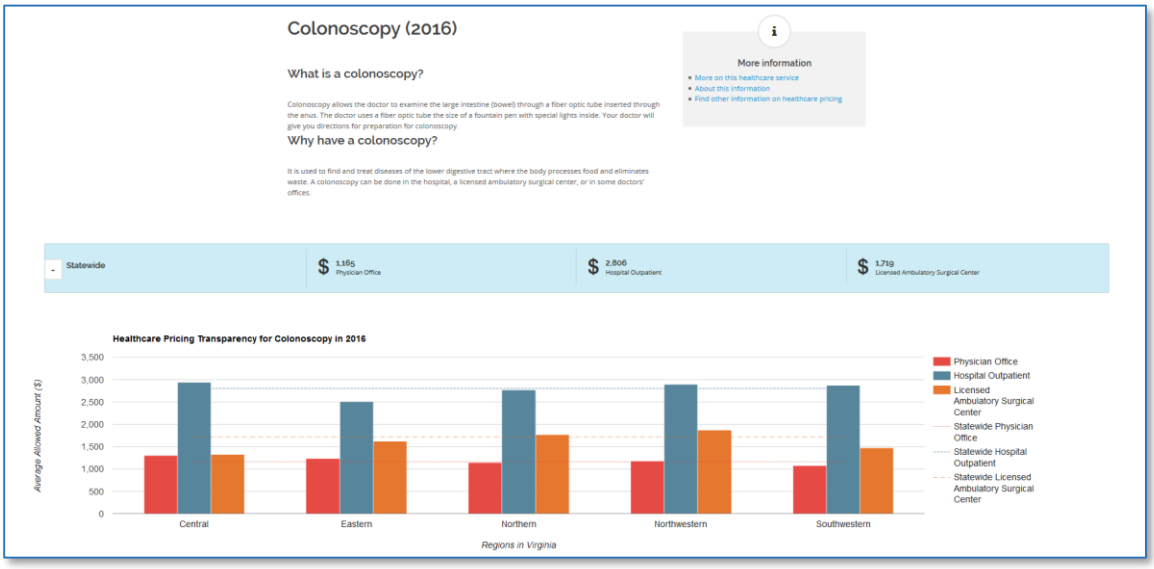
Using measures designed primarily through the Choosing Wisely effort, Milliman developed the MedInsight Health Waste Calculator as a tool to measure the impact of low-value services using claims data. Working in collaboration with the VCHI and Milliman, VHI has identified hundreds of millions of dollars spent on low-value healthcare using Virginia APCD claims data. Reports from the MedInsight Waste Calculator bolster comprehensive care analyses and further enable healthcare managers to confirm whether care appears appropriate, likely low value or almost certainly low value. These metrics are not prescriptive—they provide a launching point for understanding ways to improve patient care and lower costs.



Over the past four years, multiple rounds of reports have been created using the MedInsight Health Waste Calculator Tool. These reports have established Virginia as a national leader in low-value care reporting and were the basis for the October 2017 article "Low-Cost, High-Volume Health Services Contribute The Most to Unnecessary Health Spending", the third most read article of that year for Health Affairs which may be found at https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.0385?journalCode=hlthaff

## Increasing Healthcare Transparency for Consumers

In July 2018, VHI's most recent Healthcare Pricing Transparency report was published. This report includes actual allowed amounts for 32 commonly performed services in the Commonwealth and by Health Planning Region. Each report has the capability to be segmented by major cost categories such as facility, physician and radiology. Data is currently being reported for 2016 with plans for the 2017 report being finalized in early 2019.




VHI was also awarded grant funding from the Network for Regional Healthcare Improvement (NRHI) & the Robert Wood Johnson Foundation to address barriers to reporting on Total Cost of Care (TCoC) by healthcare provider/group in the Commonwealth of Virginia. Total Cost of Care is a risk-adjusted measure of the total amount of money spent per month to care for a patient. The measure does not disclose reimbursement amounts paid by health plans to providers for specific services. VHI's work has included participating in an extensive educational program on the intricacies of reporting TCoC as well as delivering several presentations to drive stakeholder engagement. VHI has received approval from the APCD Advisory Committee to move toward public reporting of regional information in the next one to two years. This would represent a large step forward in healthcare transparency in Virginia

Affordable Care Together
Network for Regional Healthcare Improvement

**Other projects of note completed in 2018 include:**

- Exploring drivers of primary care utilization by geographical area in collaboration with Virginia Commonwealth University.
- Calculating the potential financial savings of intervention with asthma patients with the University of Virginia.
- Analyzing the variance rates of chronic opioid use following different types of surgeries in partnership with the Virginia Tech School of Medicine.
- Providing detailed reporting to physician researchers at Valley Health System to explore prescription patterns for nursing home patients with dementia.

### B. Potential Actions to Improve the Value of the APCD

While the Virginia APCD already provides significant value to all Virginia healthcare stakeholders, VHI continues to explore ways to enhance the program including:

- Engaging with additional health plans to expand participation in the Virginia APCD.
- Reaching out to self-insured employers through meetings, publications and conferences to encourage submission of their claims data to the Virginia APCD.
- Pursuing institutional review board approval to re-instate collection of Substance Abuse and Mental Health Services Administration Part 2 substance abuse claims data.
- Moving to a quarterly data purchase cycle with Centers for Medicare and Medicaid Services to increase the number of annual APCD refreshes.

## IV. ConnectVirginia Health Information Exchange

The ConnectVirginia Health Information Exchange is another Virginia effort which is mentioned specifically in § 32.1-276.9:1. It provides a safe, confidential, electronic system to support the exchange of patient medical information among healthcare providers—both here in Virginia and beyond. ConnectVirginia utilizes secure, electronic, internet-based technology to allow medical information to be exchanged by participating healthcare providers.

In October 2011, VDH awarded a contract to Community Health Alliance (CHA) to build and operate a statewide health information exchange, to be later named "ConnectVirginia" (see website www.connectvirginia.org). The contract with CHA was pursuant to the Cooperative Agreement between the Office of the National Coordinator for Health Information Technology (ONC) and VDH and was designed to build an health information exchange infrastructure in line with the Strategic and Operations Plans developed by the Health IT Advisory Commission.

In January 2014, prior to the termination of the contract between VDH and CHA, ConnectVirginia Health Information Exchange, Inc. was established and remains the statewide health information exchange entity today.

## A. ConnectVirginia Health Information Exchange Status and Business and Technical Strategy through 2018

ConnectVirginia continued its existing business and technical strategy, which include:

- Operating the Public Health Reporting Pathway, a secure, electronic means to transport public health data such as immunizations, syndromic surveillance, electronic lab reporting, and cancer. Bi-directional immunizations functionality is also available.
- Maintaining the Virginia Advance Health Care Directive Registry (ADR) where Virginia residents can store important healthcare documents to protect their legal rights and ensure medical wishes are honored in the event they cannot manage their own care.
- Facilitating secure exchange of laboratory orders and results for Virginia's Newborn Screening program.
- Providing the trust and legal framework for participants to onboard to eHealth Exchange—the nationwide health information exchange.
- Replacing the Encounter Alerts service with the Emergency Department Care Coordination (EDCC) Program, which is a more robust and real-time alerting service.

## B. ConnectVirginia--Increasing Benefits of Healthcare Exchange to Virginia Consumers, Health Insurance Companies and Providers

The 2017 Virginia General Assembly established the EDCC Program in VDH to provide a single, statewide technology solution that connects all hospital emergency departments (ED) in the Commonwealth. 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 the EDCC Program to have all hospitals operating EDs in the Commonwealth and all Medicaid Managed Care contracted health plans participating in the Program by June 30, 2018, which was considered Phase I. Phase I was completed where 129 hospital facilities and 6 Medicaid Managed Care contracted health plans were onboarded.

Phase II will expand the EDCC Program to include the State Employee Health Plan and all non-ERISA commercial and Medicare health plans operating in the Commonwealth by June 30, 2019. The General Assembly appropriated $370,000 from General Funds to VDH, to be matched with $3,300,000 by the HITECH Act funds, for a total budget in fiscal year 2018 of $3.7 million. It is important to note that the EDCC Program is supported by a wide array of stakeholders, including multiple government entities. The VDH contracted ConnectVirginia to manage and oversee the EDCC Program with assistance from VHI.

The legislation defines the EDCC Program as having 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
- 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)

- 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
- Provides a patient's designated primary care physician 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
- Provides a patient's designated managed care organization and supporting clinical and care management personnel with care coordination plans, discharge and other treatment and care coordination information about a member receiving services in a hospital ED and
- Integrates with the Prescription Monitoring Program (PMP) and ConnectVirginia's 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.

## C. Time Line of Establishing the EDCC Program and Related Projects

In 2019, ongoing efforts to onboard the State Employee Health Plan and all non-ERISA commercial and Medicare health plans operating in the Commonwealth will continue, with completion by June 30, 2019. 2019 efforts will also involve the onboarding of downstream providers, such as but not limited to; primary care, specialty care, Federally Qualified Health Care organizations, community service boards, long-term care, etc.

The EDCC Program will be continuously monitored and evaluated to ensure the objectives are being met. All EDs in the Commonwealth as well as all Medicaid Managed Care health plans signed EXCHANGE Trust Agreements, are receiving real-time patient health information and have the ability to communicate and collaborate within their workflow. The "EDie" alerts that the EDCC Program technology provides to each hospital ED are triggered by analytics. Whenever a high-utilizer (currently defined as 5 ED visits within 12 months) arrives in an ED, an alert is triggered. There are also currently five other patient-specific risks that trigger alerts that will be continually evaluated.

Phase I also included integration with the Virginia ADR and partial integration with the Virginia PMP. Phase II works towards achievement of the second half of the legislative requirements. Connecting with the primary care physician (PCP) and other non-hospital downstream providers, prioritizing care coordination plans and completing integration with the PMP.

In order to ensure the program continues to meet common priorities, such as interoperability and collaboration amongst all key stakeholders, the EDCC Advisory Council, VDH, DMAS, and ConnectVirginia developed the Clinical Consensus Group (CCG). The CCG consists of advocates who meet monthly, to assess the challenges and results of the use of the ED Information Exchange and the EDCC technology solution. The CCG identifies opportunities for improvement of the program and the technology solution, establishes community standards for complex

patient care management and care planning and inculcates those best practices recommendations across the community.

The EDCC Program emphasizes high-utilizers or patients that often present to the ED with chronic health concerns that have gone untreated or unmanaged. Substance users make up a large percentage of these high utilizers. Currently, "EDie" alerts are triggered in the EDCC Program by an ED visit. VDH has received a CDC grant to build out the functionality of the EDCC technology so that alerts are triggered by an opioid overdose, a PMP risk event or a NARCAN administration event. This functionality is in development with a deadline from the grant for September 1, 2019.

## V. Expanded Health System Financial Information

Since 1996 Virginia health Information has been collecting financial information on Virginia hospitals. As hospitals have evolved into larger systems, the need for more comprehensive reporting on parent/subsidiary operations and financial status has been recognized as a priority. Beginning in 2016, VHI formed a workgroup to address this need. That effort culminated in an expansion of information collected to reflect financial information on health system components other than hospitals such as physician provider groups and other growing components of health systems. The first series of parent/subsidiary reporting will begin with fiscal year data ending in 2017.

HB2101 of 2017 expanded hospital charity care reporting and standardized the reporting to be valued at Medicare rates. State, provider and health plan representatives collaborated on a process to implement this reporting system for charity care written off between July and December 2017, and the report was submitted to the General Assembly on November 1, 2018, as required.

## VI. Summary

Section 32.1-276.9:1 was enacted in order to ensure that as changes in the healthcare system are planned and implemented, the Commonwealth is positioned to understand how changes will affect its residents and help ensure that the Triple Aim goals of better health, better care and lower cost are met.

Toward that end, the workgroup's mission is focused on:

- Identifying various health information needs related to implementation of healthcare reform, and
- Developing recommendations to ensure existing health information work in concert to support the Triple AIM and identify redundancies or outdated collection systems that can be eliminated, streamlined or otherwise modified.

Virginia Health Information looks forward to this ongoing effort and the opportunity to be of assistance in identifying and collaborating with stakeholders to support the health information needs of the Commonwealth of Virginia.