2021 HEALTH INFORMATION NEEDS WORKGROUP

Virginia Health Information's

Report to the State Health Commissioner

FROM NUMBERS TO KNOWLEDGE
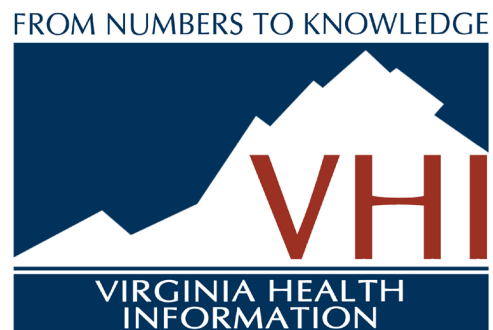
December 1, 2021

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.

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.

II.   2020 Workgroup Members

During 2020, the Health Information Needs Workgroup (HINW) was re-established after a new call for nominations from all stakeholder groups identified in § 32.1-276.9:1. As of Fall 2021, the HINW is comprised of the following representatives:

Representative	Organization
Norm Oliver, MD	Virginia Department of Health (VDH)
Tim Powell	VDH
Jennifer Palazzolo	Department of Medical Assistance Services (DMAS)
Katie Linkenauger	DMAS
Barbara Allison-Bryan, MD	Department of Health Professions (DHP)
Yetty Shobo	DHP
James Young	State Corporation Commission's Bureau of Insurance (BOI)
Eric Lowe	BOI
Beth Bortz	Virginia Center for Health Innovation
Ibe Mbanu, MD	Advocate Health Care
Jake O'Shea, MD	HCA Capital Division
David Yi	Mary Washington Healthcare
Bernie Inskeep	United Healthcare
Sheryl A. Turney	Anthem
Moss Mendelson, MD	Sentara
Russell Libby, MD	Virginia Pediatric Group
Mason Shea	Mercer
Mike Davis	CGI Consulting
Debbie Condrey	The Sequoia Project
Victoria Savoy	State Corporation Commission (SCC)
Kyle B. Russell	Virginia Health Information (VHI)

III.   Inventory of Current Health Information Programs and Reform Efforts

Consistent with its legislative mission, the following is an inventory of health information programs and reform efforts including updates since the 2020 HINW report:

Emergency Department Care Coordination Program

The 2017 General Assembly established the Emergency Department Care Coordination (EDCC) Program within the VDH to provide a single, statewide technology solution that connects all hospital emergency departments in the Commonwealth to facilitate real-time communication and collaboration among

physicians, other healthcare providers and other clinical and care management personnel for patients receiving services in hospital emergency departments for the purpose of improving the quality of patient care services (re: § 32.1-372).

Patients with 10 or more ED Visits within 12 months from August 2020 through September 2021

14,337
people

230,362
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	9,336	106,302	11	17,406	1	4.0	66.5%	0.3%	5.4%
	15 - 19	2,566	42,468	16	5,943	1	3.9	77.3%	0.4%	10.9%
High Utilization	20 - 29	1,492	34,873	23	4,789	2	3.4	83.6%	0.4%	14.2%
	30 - 49	673	24,538	35	2,664	2	3.5	88.0%	0.3%	18.7%
Super Utilization	50 - 74	157	9,344	58	721	2	3.2	91.1%	1.3%	31.2%
	75 - 99	56	4,665	82	266	2	3.1	94.6%	0.0%	35.7%
Extreme Utilization	100 +	57	8,172	123	222	2	3.3	100.0%	0.0%	45.6%
Grand Total		14,337	230,362	12	32,011	1	3.9	71.7%	0.3%	8.5%

The EDCC Program will continue to encourage care guidelines to be shared inside of the tool. The number of total actions has increased over time as providers add content. A large portion of total actions include the creation of content in the EDCC Program meaning Virginia healthcare providers are writing and uploading content such as care guidelines, care histories and security and safety events. Care guidelines, or care insights, are designed to aid emergency department 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 Emergency Department Information Exchange (Edie) alert, will be automatically sent to any emergency department in Virginia or on the Collective Network at which the patient presents and can greatly reduce overutilization of the ED as shown in the graph below.

Care Guidelines have produced a 30+% Reduction in Super Utilization of the ED in Virginia in 2020 and 2021
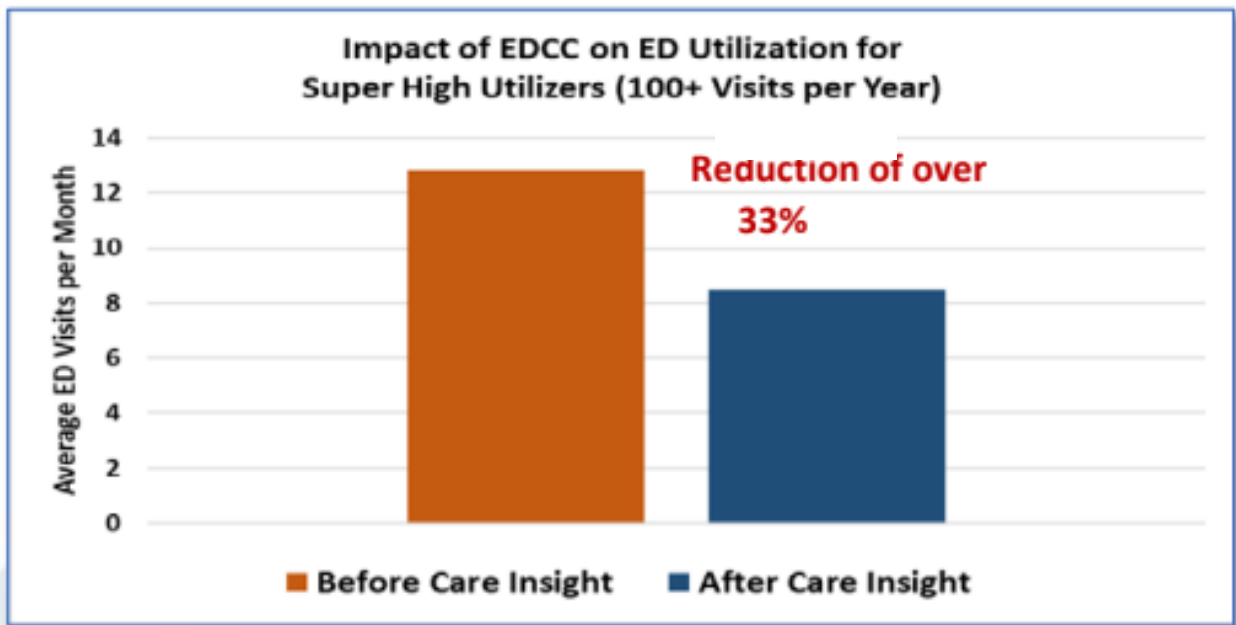
COVID-19 Laboratory Results. In April 2020, the Virginia Department of Health (VDH) began sending daily electronic laboratory data to integrate into the EDCC Program. All laboratories and healthcare systems located in Virginia are required to report COVID-19 electronic laboratory results to VDH, which 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 are able to 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 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. As of February 2021, five Virginia hospitals or health systems are utilizing the CoP functionality via the EDCC Program.

In addition to integrating COVID-19 laboratory results and facilitating hospital compliance with the CMS Conditions of participation, the program has enjoyed the following successes noted below:

- Executing ETAs and onboarding 9 managed care entities, 28 skilled nursing facilities, 7 Community Service Boards and 25 downstream providers including many with multiple locations as of November 2021.
- Reaching out to add patients of the primary care physician (PCP) and supporting clinical and care management personnel as required in the legislation.
- Supporting statewide and regional collaborative meetings and initiatives.

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.

All Payer Claims Database

The Virginia APCD is a collection of paid medical and pharmacy claims from all health plans that cover a minimum of 1,000 Virginia resident lives. Each claim contains information about the care provided, the level of reimbursement, servicing/billing provider details, patient demographics and other factors that are linked together longitudinally over time. Originally created as a voluntary program in 2012,

Sample benchmark Dashboard report prepared for over 1,000 Practices participating in Smarter Care Virginia
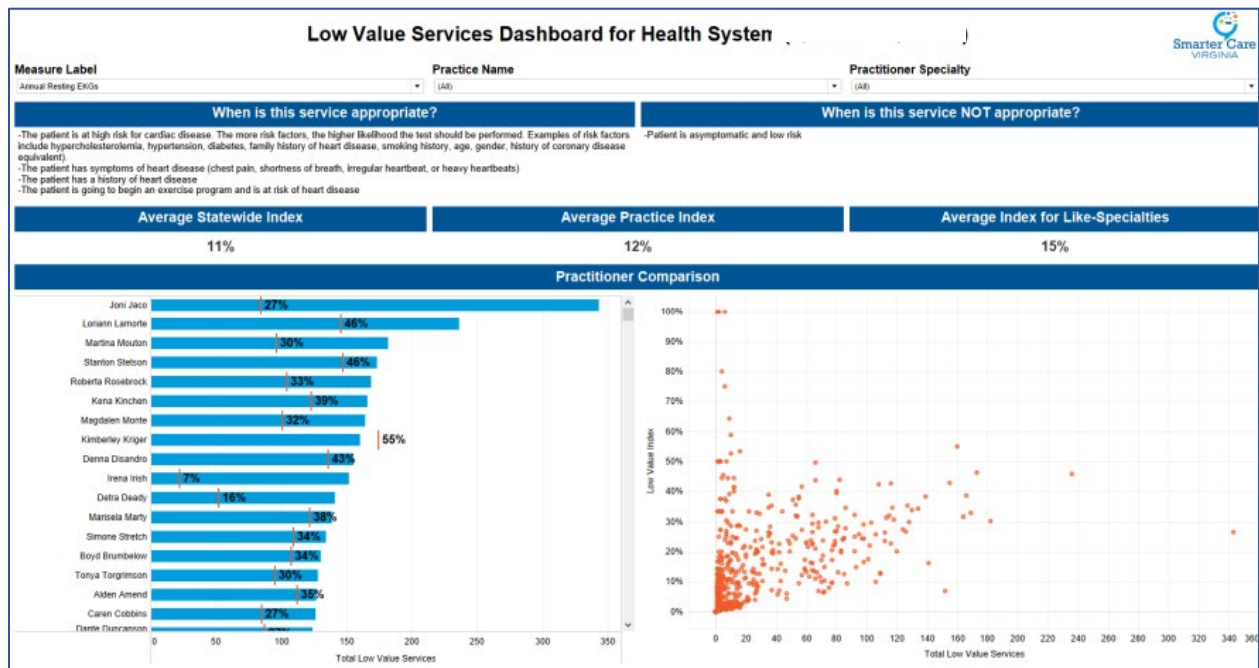
submission to the APCD was later mandated in 2019. VDH, DMAS and the SCC BOI are all given access to the database by law. Researchers, providers and other organizations can request and license data and reports from the APCD as approved by an Advisory Release Committee. The APCD serves as the data source for a variety of programs/publications, including the Healthcare Pricing Transparency report, the Commercially Reasonable Payments Data Set and the Smarter Care Virginia program.

As part of the new mandatory program, VHI has transitioned to collecting data under the Common Data Layout (CDL). Virginia is a pioneer in implementing the CDL, which aims to standardize APCD data collection for states around the country to minimize administrative burden and maximize data quality. In 2021 data was provided to analyze childhood wellness visits, utilization of telehealth, opioid prescription patterns and healthcare cost growth.
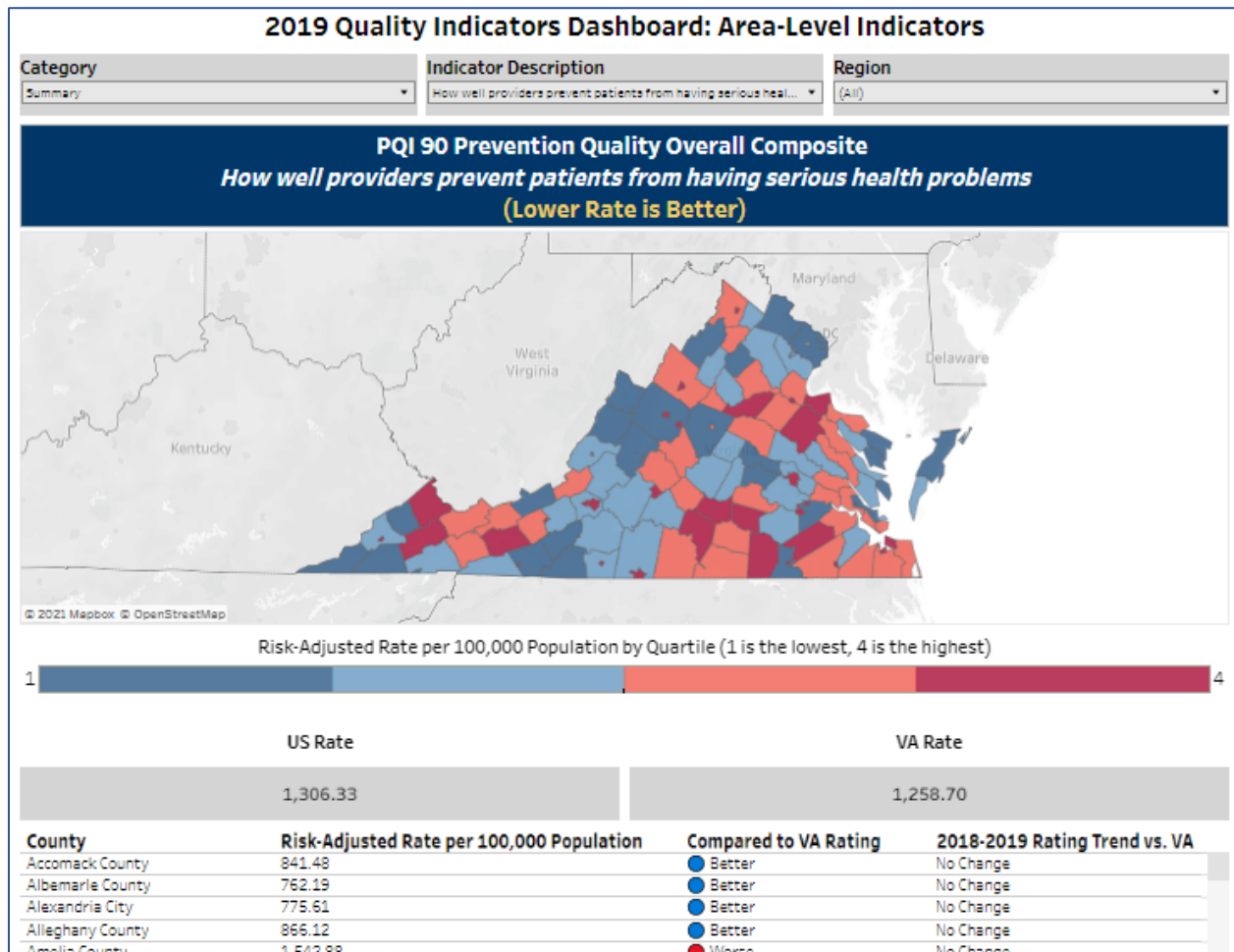
Advanced Directives Registry

This secure registry allows Virginia residents to store their advance healthcare directive, durable do not resuscitate, healthcare power of attorney, financial power of attorney and other documents so that medical providers, emergency responders, family members and anyone else to whom they grant access will honor their wishes. The Advanced Directives Registry (ADR) is a long-standing program of ConnectVirginia (now a program of VHI), with a technology platform provided by US Living Wills. Documents and data stored within the Virginia ADR are available to providers within the EDCC via the Collective Platform. VHI is now collaborating with Honoring Choices to expand knowledge and use of the registry. In addition, VHI employees have been trained and certified as Advanced Care Planning Facilitators.

Public Health Reporting Pathway

The Public Health Reporting Pathway (PHRP) provides the transport mechanisms for electronic public health reportable data to the VDH. This framework automates the process for submitting immunizations, reportable electronic lab reporting (ELR), syndromic surveillance data and cancer case reporting. The PHRP also allows public health reportable data to be sent from a certified electronic health record (EHR) through VHI, enabling providers and hospitals to improve workflows and data accuracy while also meeting the Meaningful Use measure. During the 2020 COVID pandemic, VHI onboarded over 100 new entities to the PHRP. It was this PHRP contractual relationship between VHI and VDH that enabled swift implementation of the COVID-19 integration of testing data within the EDCC Program. This COVID-19 testing and results data enabled ED personnel to better treat their patients while protecting emergency personnel from potential risk of infection.

Patient Level Data System

The Patient Level Data (PLD) system is a database of hospital acute discharges for all Virginia licensed hospitals. Information in the PLD system includes diagnoses, surgical procedures, charges, the number of days in the hospital and other information routinely collected as part of hospital bills. Similar information is also collected on several commonly performed outpatient surgical procedures.

2019 Quality Indicators Dashboard: Area-Level Indicators

Category	Indicator Description	Region
Summary	How well providers prevent patients from having serious heal...	(All)

PQI 90 Prevention Quality Overall Composite
How well providers prevent patients from having serious health problems
(Lower Rate is Better)

Risk-Adjusted Rate per 100,000 Population by Quartile (1 is the lowest, 4 is the highest)

US Rate	VA Rate
1,306.33	1,258.70

County	Risk-Adjusted Rate per 100,000 Population	Compared to VA Rating	2018-2019 Rating Trend vs. VA
Accomack County	841.48	● Better	No Change
Albemarle County	762.19	● Better	No Change
Alexandria City	775.61	● Better	No Change
Alleghany County	866.12	● Better	No Change
Amelia County	1,543.98	● Worse	No Change

Health Information Exchange

EXCHANGE (now a program of VHI) provides a secure method to query and retrieve patient data by facilitating the process of onboarding participants directly to eHealth Exchange, a nationwide health information exchange (HIE). EXCHANGE participants must meet legal, technical and financial requirements to onboard (integrate with) to EXCHANGE. Virginia Health Information is the recognized statewide HIE for the Commonwealth of Virginia. VHI provides a safe, confidential, electronic system to support the exchange of patient medical information among healthcare providers both here in Virginia and beyond. VHI utilizes secure, electronic, internet-based technology to allow medical information to be exchanged by participating healthcare providers.
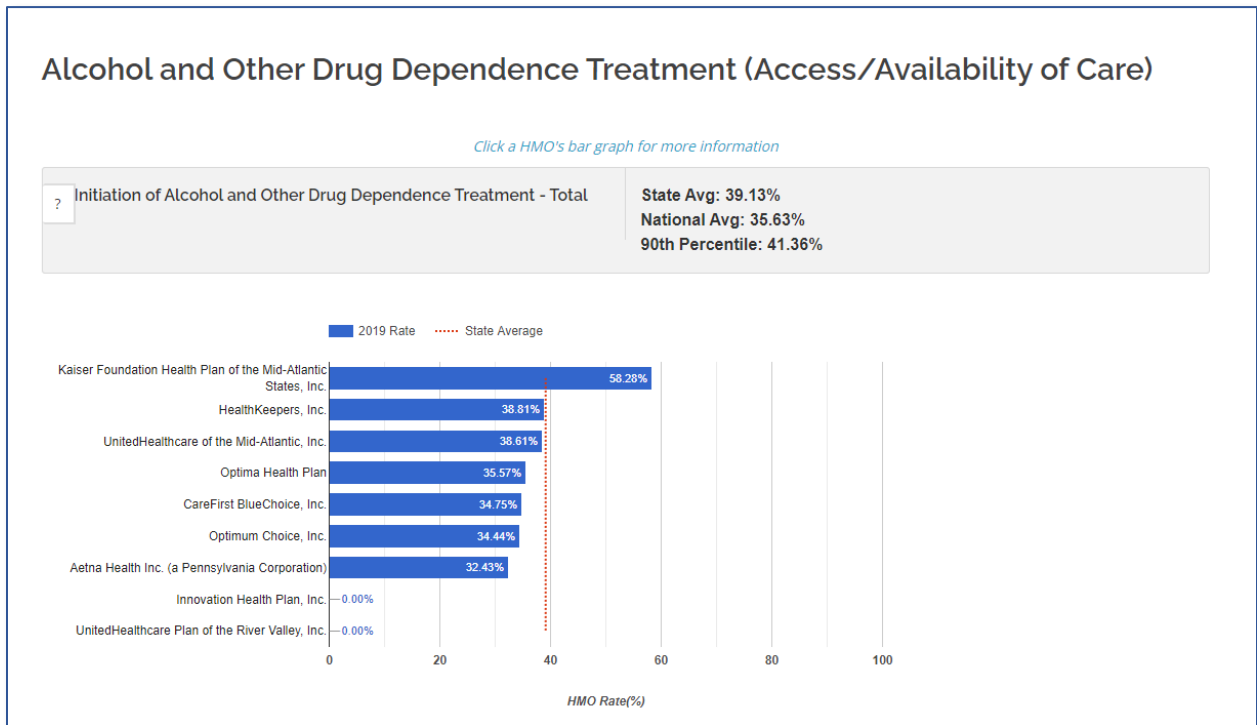
Virginia Health Benefits Exchange

The Virginia Health Benefits Exchange was created by the 2020 Virginia General Assembly to be operated as a new division within the SCC. Virginia is establishing a state-based exchange on the Federal Platform for plan year 2021 before transitioning to a full state-based exchange by plan year 2023. The Virginia Health Benefits Exchange will be an online marketplace where qualified individuals can shop for, compare and enroll in health insurance coverage. Additionally, the Virginia Health Benefits Exchange

will create a small employer program where eligible employees of qualified small employers will be able to enroll in coverage.

Health Maintenance Organization Comparison Report

This mandated report provides the public with cost and quality data on Virginia Health Maintenance Organization (HMO) health plans. Available via the VHI website, current and prospective insurance purchasers can compare HMOs on nationally endorsed performance measures and official state filed financial metrics. The report includes health plan financial and cost data obtained from filings with the SCC and quality data obtained from the National Committee for Quality Assurance. Consumers can use the tool to become more informed in their health insurance decision-making and more engaged in their care priorities.

Alcohol and Other Drug Dependence Treatment (Access/Availability of Care)

Click a HMO's bar graph for more information

? Initiation of Alcohol and Other Drug Dependence Treatment - Total	State Avg: 39.13% National Avg: 35.63% 90th Percentile: 41.36%

■ 2019 Rate   ⋯⋯ State Average

HMO	HMO Rate (%)
Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc.	58.28%
HealthKeepers, Inc.	38.81%
UnitedHealthcare of the Mid-Atlantic, Inc.	38.61%
Optima Health Plan	35.57%
CareFirst BlueChoice, Inc.	34.75%
Optimum Choice, Inc.	34.44%
Aetna Health Inc. (a Pennsylvania Corporation)	32.43%
Innovation Health Plan, Inc.	0.00%
UnitedHealthcare Plan of the River Valley, Inc.	0.00%

HMO Rate(%)

Prescription Monitoring Program

Virginia's Prescription Monitoring Program (PMP) is a 24/7 database containing information on dispensed controlled substances included in Schedule II, III and IV, those in Schedule V for which a prescription is required, naloxone and all drugs of concern and cannabidiol oil or THC-A oil dispensed by a pharmaceutical processor in Virginia. The primary purpose of the PMP is to promote safe prescribing and dispensing practices for covered substances by providing timely and essential information to healthcare providers. Law enforcement and health profession licensing boards use the PMP to support investigations related to doctor shopping, diversion and inappropriate prescribing and dispensing. The PMP:

- promotes the appropriate use of controlled substances for legitimate medical purposes
- helps to monitor compliance with a treatment plan

- deters the misuse, abuse and diversion of controlled substances
- helps law enforcement to identify multiple prescriber use, drug diversion and illegal prescribing and dispensing
- supports health profession licensing boards in investigations
- allows analysis of data that may help identify trends with specific drugs, geographic regions, patient demographics and provider demographics

and is used by:

- every licensed prescriber in Virginia, all of whom have access by virtue of the license
- delegates of prescribers and pharmacists
- investigators for licensing boards
- office of the Medical Examiner
- authorized law enforcement agents
- approved parole and probation officers
- every veterinarian who dispenses an opioid or other covered substance > 7 days
- every person (or pet) who is dispensed a covered substance has a record of that dispensing in the PMP

Efficiency and Productivity Information Collection System and Annual Licensure Survey Data

The Efficiency and Productivity Information Collection System (EPICS) encompasses financial and operational information collected on all licensed ambulatory surgical centers, hospitals and nursing facilities in Virginia. Annual Licensure Survey Data (ALSD) includes utilization and ancillary data collected from Virginia hospitals, nursing facilities, ambulatory surgical centers and freestanding physician offices subject to Certificate of Public Need (COPN) reviewable services. The two collections encompass ten topic areas with over 600 data elements. Data from both programs are used for COPN applications to ensure that services provided are needed within the community. Increased transparency incentivizes providers to delivers care as efficiently as possible.

Since 1996, VHI 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 as well as to renew all collected data elements. That effort culminated in an expansion of the 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 began with data reflective of the fiscal year ending in 2017. VHI released its first public report of fiscal year ending 2019 revenue, expense and balance sheet information in November 2021 at www.vhi.org/parent.

VHI released its first Public Report on Hospital Parent Company Financials in 2021

VCU Health System

General Info   Financial   Subsidiaries

Financial Information
For Fiscal Year 7/1/2018 - 6/30/2019
Why is this important?

Revenue

Net patient service revenue	$2,189,499,536
Other operating revenue	$1,863,631,875
Net assets released from restriction	$0
Total operating revenue	$4,053,131,411

Expense

Labor	$1,358,279,540
Non-labor	$2,484,924,104
Capital	$145,753,330
Taxes	$694,109
Total operating expense	$3,989,651,083
Operating income	$63,480,328
Net non-operating gains (loss)	$83,531,681
Revenue and gains in excess of expenses and losses	$147,012,009

Balance Sheet

Current assets	$1,369,233,074
Other assets	$2,825,940,838
Total assets	$4,195,173,912
Current liabilities	$715,485,563
Long term liabilities	$935,594,945
Total liabilities	$1,651,080,508
Total net assets	$2,544,093,404

Virginia Healthcare Workforce Data Center

Section § 54.1-2506.1 of the Code of Virginia in 2009 provides for DHP's collection and maintenance of the Healthcare Workforce Data Center (HWDC)'s data for workforce and health planning purposes. The DHP HWDC works to improve the data collection and measurement of Virginia's healthcare workforce through regular assessment of workforce supply and demand issues among the more than 60

Virginia CareForce Snapshot

Job satisfaction is quite high among VA healthcare workforce	Information on the condition of the healthcare labor	Healthcare professionals work in various sectors of the	The work settings of VA healthcare professionals are	Some of the various roles that healthcare professionals play at	Retirement expectation information is critical

Retirement Expectations

Profession Type: (All)   Year: 2018

Profession Type	Expect to Retire Under Age 60	Expect to Retire Under Age 65	Expect to Retire Within 2 Years	Expect to Retire Within 10 Years
Allied Health	19%	46%	4%	16%
Behavioral Health	8%	23%	7%	26%
Long-term Care Administrator	19%	30%	8%	25%
NP, MD, DO, and PA	12%	35%	7%	27%
Nursing	7%	24%	4%	14%
Optometrist	13%	37%	5%	23%
Oral Health	26%	52%	7%	27%

Profession	Expect to Retire Under Age 60	Expect to Retire Under Age 65	Expect to Retire Within 2 Years	Expect to Retire Within 10 Years
Audiologists	12%	37%	4%	18%
Occupational Therapists	18%	40%	3%	18%
Occupational Therapy Assistants	19%	47%	6%	15%

professions and over 350,000 practitioners licensed in Virginia by DHP. The DHP HWDC is provided online to ensure accessibility of the findings among healthcare decision makers, hospital systems, academic institutions and constituents statewide. The data center includes the Virginia Practitioner Profile, which houses data on Virginia physicians' demographic, education, specialty, awards, payment types received, disciplinary actions taken by the board of medicine, felonies, etc. accessible at https://www.vahealthprovider.com.

IV.   Action Items and Next Steps

1. **Pursue expansion of Virginia Outpatient Patient Level Data**

   VHI will work with VDH to respond to comments received regarding the periodic review of Virginia regulation 12-VAC5-218 Rules and Regulations Governing Outpatient Health Data Reporting.

2. **Determine feasibility of home care agencies and home meal deliveries gaining access to notifications from the EDCC Program**

   VHI will request a legal review of whether or not home care agency and/or home meal delivery access to the EDCC would be classified as treatment, payment or operations as required by Health Insurance Portability and Accountability Act or as otherwise allowed.

3. **Explore feasibility of making the ADR available to healthcare providers outside of the emergency department via their EHR systems**

   VHI will follow up with the technology vendor for the ADR to determine the technical feasibility and reach out to select health systems to assess EHR integration feasibility.

4. **Explore feasibility of an expansion of the HMO Comparison Report to encompass Medicare and Medicaid HMOs**

   VHI will identify the best of source of audited data consistent with the latest version of the Healthcare Effectiveness Data and Information Set of the National Committee for Quality Assurance for Medicaid and Medicare HMOs and the optimal method of collection.

5. **Pursue reporting on Total Cost of Care within the APCD**

   VHI will work through the APCD Advisory Committee to identify the optimal methodology for reporting Total Cost of Care in Virginia.

6. **Pursue adding standardized ratios used within Certificate of Public Need (COPN) applications to existing Annual Licensure Survey Data (ALSD) Publications**

   VHI will outline and present potential metrics derived from State Medical Facilities Plan and Weldon Cooper Population Data Center to industry workgroup for review.

7. **Provide expanded access to vaccination data to Virginia Providers and Plans (2021)**

   Virginia providers and health plans have expressed interest in patient panel/full enrollment level data and analytics on vaccinations. VHI intends to pilot a new tool for COVID-19 vaccination analytics in 2022 that will help meet these needs.

V.   Closing Remarks

§ 32.1-276.9:1 was developed in order to ensure that as changes in the healthcare system are planned and implemented, the Commonwealth of Virginia 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 programs work in concert to support the triple aim and identify redundancies or outdated collection systems that can be eliminated, streamlined or otherwise modified.

VHI 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.