



WHO WE ARE

In Virginia, the major community partners engaged in health reform -- health care providers, health systems, health plans, pharmaceutical manufacturers and laboratory companies, employers, consumers, and government – came together to create a public-private partnership to accelerate the adoption of value-driven models of wellness and health care. This formal partnership is known as the Virginia Center for Health Innovation (VCHI).

These partners first came together in August 2010, when Governor McDonnell appointed 24 political, health system, civic and business leaders to the Virginia Health Reform Initiative Advisory Council. The Council was asked to develop recommendations for implementing health reform, and to seek innovative solutions that meet the needs of Virginia's citizens and its government. The creation of the Virginia Center for Health Innovation stemmed directly from one of these recommendations.

WHAT WE DO

VCHI improves value in health care by focusing on four core services. These are:



Convening and Educating Stakeholders interested in accelerating the adoption of value-driven models of wellness and healthcare in an effort to improve patient outcomes and advance Virginia's well-being and economic competitiveness.



Overseeing and Facilitating Demonstration Research to test and evaluate models of value-driven wellness and health care.



Leveraging Data and Analytical Resources that educate and equip health care providers, public health professionals, government representatives, community organizations, employers, and consumers to make more informed decisions.



Helping Prepare the Health Care Workforce and the Public for a high quality, value-driven health care marketplace which features engaged and satisfied clinicians and patients.

THE VIRGINIA HEALTH VALUE DASHBOARD

In an effort to better understand how Virginia performs in delivering health value, and to determine how best to facilitate action for improvement where necessary, VCHI is launching the Virginia Health Value Dashboard. Funded with support from the Virginia General Assembly, the Dashboard includes three aims -- 1) reducing low value health care, 2) increasing high value health care, and 3) ensuring the Commonwealth has the necessary infrastructure to measure and reward value in health care. These three aims are captured by nine value indicators, which were approved by consensus at a joint meeting of the VCHI Board and Leadership Council.

As part of its Dashboard data collection and analytics effort, VCHI is partnering with the Virginia Association of Health Plans and Catalyst for Payment Reform (CPR) on CPR's Scorecard 2.0 initiative. Through this collaboration, Virginia received data on how much payment reform there is in the state and of what type. Scorecard 2.0 also looks at twelve metrics designed to better assess whether payment reform correlates with improved health care quality and affordability across the health care system. Collectively, this information feeds into the larger Virginia Health Value Dashboard work.

- = Better than statewide rate
- = Same as statewide rate
- = Worse than statewide rate



REDUCING LOW VALUE CARE

Utilization and Cost of Avoidable Emergency Room Visits

Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	12.8%	●	●	●	●	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	3.5	●	●	●	●	●
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	82%	●	●	●	●	●
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	6%	●	●	●	●	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	21%	●	●	●	●	●
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	76%	●	●	●	●	●

Inappropriate Preventable Hospital Stays

Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	2,266	●	●	●	●	●
--	-------	---	---	---	---	---

INCREASING HIGH VALUE CARE

Virginians who are Current with Appropriate Vaccination Schedules

Childhood Immunization Status: DTaP	55%	●	●	●	●	●
Childhood Immunization Status: Influenza	52%	●	●	●	●	●
Childhood Immunization Status: Hepatitis A	81%	●	●	●	●	●
Childhood Immunization Status: Hepatitis B	39%	●	●	●	●	●
Childhood Immunization Status: HiB	73%	●	●	●	●	●
Childhood Immunization Status: IPV	66%	●	●	●	●	●
Childhood Immunization Status: MMR	83%	●	●	●	●	●
Childhood Immunization Status: Pneumococcal Conjugate	57%	●	●	●	●	●
Childhood Immunization Status: Rotavirus	58%	●	●	●	●	●
Childhood Immunization Status: VZV	83%	●	●	●	●	●
Immunizations for Adolescents: HPV Vaccine*	14%	●	●	●	●	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	58%	●	●	●	●	●
Immunizations for Adolescents: Tdap Vaccine	76%	●	●	●	●	●

Comprehensive Diabetes Care

Hemoglobin A1c (HbA1c) Testing	77%	●	●	●	●	●
Medical Attention for Nephropathy**	-	-	-	-	-	-

Clinically Appropriate Cancer Screening Rates

Breast Cancer Screening***	51%	●	●	●	●	●
Cervical Cancer Screening	62%	●	●	●	●	●
Colorectal Cancer Screening	32%	●	●	●	●	●

*EBM version 7 rates were used for 2016 benchmark
 ** 2017 rates could not be generated for this measure due to the current inavailability of Medicare Part D prescription claims for the corresponding period
 *** Medicare FFS rates, which comprise the majority of the volume for this measure, were not available for 2016 due to the lookback period required by the methodology

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
Utilization and Cost of Avoidable Emergency Room Visits			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	12.8%	13.4%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	3.5	3.8	●
Potentially Avoidable ED Visits - Per Member Per Year	0.04	0.05	●
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	82%	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	6%	8%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	21%	25%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	75%	75%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	76%	77%	●
Inappropriate Preventable Hospital Stays			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	2,266	2,437	●
INCREASING HIGH VALUE CARE	2017 Rate	2016 Rate	Trend
Virginians who are Current with Appropriate Vaccination Schedules			
Childhood Immunization Status: DTaP	55%	59%	●
Childhood Immunization Status: Influenza	52%	44%	●
Childhood Immunization Status: Hepatitis A	81%	82%	●
Childhood Immunization Status: Hepatitis B	39%	41%	●
Childhood Immunization Status: HiB	73%	74%	●
Childhood Immunization Status: IPV	66%	70%	●
Childhood Immunization Status: MMR	83%	85%	●
Childhood Immunization Status: Pneumococcal Conjugate	57%	60%	●
Childhood Immunization Status: Rotavirus	58%	59%	●
Childhood Immunization Status: VZV	83%	85%	●
Immunizations for Adolescents: HPV Vaccine*	14%	14%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	58%	60%	●
Immunizations for Adolescents: Tdap Vaccine	76%	77%	●
Comprehensive Diabetes Care			
Hemoglobin A1c (HbA1c) Testing	77%	76%	●
Medical Attention for Nephropathy**	-	87%	-
Clinically Appropriate Cancer Screening Rates			
Breast Cancer Screening***	51%	-	-
Cervical Cancer Screening	62%	63%	●
Colorectal Cancer Screening	32%	27%	●
IMPROVING THE INFRASTRUCTURE FOR VALUE BASED CARE	2017 Rate	2016 Rate	Trend
Claims in Virginia's All Payer Claims Database			
Percent of Virginia Total Covered Lives with Claims Included in the Virginia All Payer Claims Database	63%	62%	●
Percent of Virginia Commercially Insured Lives with Claims included in the Virginia All Payer Claims Database	42%	41%	●

*EBM version 7 rates were used for 2016 benchmark

** 2017 rates could not be generated for this measure due to the current inavailability of Medicare Part D prescription claims for the corresponding period

*** Medicare FFS rates, which comprise the majority of the volume for this measure, were not available for 2016 due to the lookback period required by the methodology

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
<i>Utilization and Cost of Avoidable Emergency Room Visits</i>			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	11%	12%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	3.0	3.4	●
Potentially Avoidable ED Visits - Per Member Per Year	0.04	0.04	●
<i>Low Value Services as Captured by the MedInsight Health Waste Calculator</i>			
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%	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	7%	8%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	23%	24%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	73%	73%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	74%	74%	●
<i>Inappropriate Preventable Hospital Stays</i>			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	2,617	2,810	●
INCREASING HIGH VALUE CARE			
<i>Virginians who are Current with Appropriate Vaccination Schedules</i>			
Childhood Immunization Status: DTaP	57%	58%	●
Childhood Immunization Status: Influenza	52%	44%	●
Childhood Immunization Status: Hepatitis A	78%	76%	●
Childhood Immunization Status: Hepatitis B	38%	37%	●
Childhood Immunization Status: HiB	71%	70%	●
Childhood Immunization Status: IPV	66%	66%	●
Childhood Immunization Status: MMR	82%	82%	●
Childhood Immunization Status: Pneumococcal Conjugate	58%	59%	●
Childhood Immunization Status: Rotavirus	59%	59%	●
Childhood Immunization Status: VZV	81%	80%	●
Immunizations for Adolescents: HPV Vaccine*	14%	13%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	52%	53%	●
Immunizations for Adolescents: Tdap Vaccine	74%	74%	●
<i>Comprehensive Diabetes Care</i>			
Hemoglobin A1c (HbA1c) Testing	81%	79%	●
Medical Attention for Nephropathy**	-	86%	-
<i>Clinically Appropriate Cancer Screening Rates</i>			
Breast Cancer Screening***	53%	-	-
Cervical Cancer Screening	60%	61%	●
Colorectal Cancer Screening	31%	25%	●

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
Utilization and Cost of Avoidable Emergency Room Visits			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	11%	11%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	1.9	1.9	●
Potentially Avoidable ED Visits - Per Member Per Year	0.02	0.02	●
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	85%	86%	●
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	12%	17%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	37%	41%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	80%	81%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	72%	73%	●
Inappropriate Preventable Hospital Stays			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	1,259	1,263	●
INCREASING HIGH VALUE CARE	2017 Rate	2016 Rate	Trend
Virginians who are Current with Appropriate Vaccination Schedules			
Childhood Immunization Status: DTaP	53%	56%	●
Childhood Immunization Status: Influenza	62%	51%	●
Childhood Immunization Status: Hepatitis A	86%	87%	●
Childhood Immunization Status: Hepatitis B	25%	34%	●
Childhood Immunization Status: HiB	69%	70%	●
Childhood Immunization Status: IPV	60%	69%	●
Childhood Immunization Status: MMR	85%	84%	●
Childhood Immunization Status: Pneumococcal Conjugate	53%	56%	●
Childhood Immunization Status: Rotavirus	54%	58%	●
Childhood Immunization Status: VZV	85%	83%	●
Immunizations for Adolescents: HPV Vaccine*	16%	18%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	63%	66%	●
Immunizations for Adolescents: Tdap Vaccine	72%	76%	●
Comprehensive Diabetes Care			
Hemoglobin A1c (HbA1c) Testing	83%	82%	●
Medical Attention for Nephropathy**	-	88%	-
Clinically Appropriate Cancer Screening Rates			
Breast Cancer Screening***	51%	-	-
Cervical Cancer Screening	75%	76%	●
Colorectal Cancer Screening	39%	32%	●

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
Utilization and Cost of Avoidable Emergency Room Visits			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	14%	14%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	4.4	4.7	●
Potentially Avoidable ED Visits - Per Member Per Year	0.05	0.06	●
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	82%	82%	●
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	5%	5%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	14%	16%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	77%	76%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	75%	75%	●
Inappropriate Preventable Hospital Stays			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	3,147	3,379	●
INCREASING HIGH VALUE CARE			
Virginians who are Current with Appropriate Vaccination Schedules			
Childhood Immunization Status: DTaP	58%	59%	●
Childhood Immunization Status: Influenza	44%	40%	●
Childhood Immunization Status: Hepatitis A	79%	81%	●
Childhood Immunization Status: Hepatitis B	60%	59%	●
Childhood Immunization Status: HiB	75%	75%	●
Childhood Immunization Status: IPV	71%	71%	●
Childhood Immunization Status: MMR	83%	85%	●
Childhood Immunization Status: Pneumococcal Conjugate	62%	62%	●
Childhood Immunization Status: Rotavirus	64%	63%	●
Childhood Immunization Status: VZV	83%	85%	●
Immunizations for Adolescents: HPV Vaccine*	14%	13%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	54%	55%	●
Immunizations for Adolescents: Tdap Vaccine	78%	78%	●
Comprehensive Diabetes Care			
Hemoglobin A1c (HbA1c) Testing	74%	71%	●
Medical Attention for Nephropathy**	-	86%	-
Clinically Appropriate Cancer Screening Rates			
Breast Cancer Screening***	48%	-	-
Cervical Cancer Screening	52%	52%	●
Colorectal Cancer Screening	26%	21%	●

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
Utilization and Cost of Avoidable Emergency Room Visits			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	14%	15%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	4.3	4.8	●
Potentially Avoidable ED Visits - Per Member Per Year	0.05	0.06	●
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	79%	79%	●
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	5%	5%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	20%	21%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	71%	71%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	83%	83%	●
Inappropriate Preventable Hospital Stays			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	2,183	2,493	●
INCREASING HIGH VALUE CARE	2017 Rate	2016 Rate	Trend
Virginians who are Current with Appropriate Vaccination Schedules			
Childhood Immunization Status: DTaP	54%	57%	●
Childhood Immunization Status: Influenza	51%	44%	●
Childhood Immunization Status: Hepatitis A	78%	79%	●
Childhood Immunization Status: Hepatitis B	34%	36%	●
Childhood Immunization Status: HiB	76%	75%	●
Childhood Immunization Status: IPV	66%	66%	●
Childhood Immunization Status: MMR	82%	85%	●
Childhood Immunization Status: Pneumococcal Conjugate	57%	58%	●
Childhood Immunization Status: Rotavirus	57%	55%	●
Childhood Immunization Status: VZV	83%	85%	●
Immunizations for Adolescents: HPV Vaccine*	11%	11%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	59%	57%	●
Immunizations for Adolescents: Tdap Vaccine	76%	75%	●
Comprehensive Diabetes Care			
Hemoglobin A1c (HbA1c) Testing	74%	74%	●
Medical Attention for Nephropathy**	-	88%	-
Clinically Appropriate Cancer Screening Rates			
Breast Cancer Screening***	52%	-	-
Cervical Cancer Screening	60%	60%	●
Colorectal Cancer Screening	31%	26%	●

REDUCING LOW VALUE CARE	2017 Rate	2016 Rate	Trend
Utilization and Cost of Avoidable Emergency Room Visits			
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	13%	14%	●
Potentially Avoidable ED Visits - Per 1,000 Member Months	4.2	4.8	●
Potentially Avoidable ED Visits - Per Member Per Year	0.05	0.06	●
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	81%	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	5%	5%	●
Don't perform population based screening for 25-OH-Vitamin D deficiency	11%	15%	●
Don't perform PSA-based screening for prostate cancer in all men regardless of age	72%	74%	●
Don't do imaging for low back pain within the first six weeks, unless red flags are present	75%	76%	●
Inappropriate Preventable Hospital Stays			
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	2,471	2,618	●
INCREASING HIGH VALUE CARE	2017 Rate	2016 Rate	Trend
Virginians who are Current with Appropriate Vaccination Schedules			
Childhood Immunization Status: DTaP	57%	64%	●
Childhood Immunization Status: Influenza	47%	41%	●
Childhood Immunization Status: Hepatitis A	79%	83%	●
Childhood Immunization Status: Hepatitis B	44%	39%	●
Childhood Immunization Status: HiB	76%	81%	●
Childhood Immunization Status: IPV	70%	75%	●
Childhood Immunization Status: MMR	83%	89%	●
Childhood Immunization Status: Pneumococcal Conjugate	59%	64%	●
Childhood Immunization Status: Rotavirus	57%	59%	●
Childhood Immunization Status: VZV	83%	88%	●
Immunizations for Adolescents: HPV Vaccine*	13%	13%	●
Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine	60%	64%	●
Immunizations for Adolescents: Tdap Vaccine	79%	81%	●
Comprehensive Diabetes Care			
Hemoglobin A1c (HbA1c) Testing	74%	75%	●
Medical Attention for Nephropathy**	-	87%	-
Clinically Appropriate Cancer Screening Rates			
Breast Cancer Screening***	53%	-	-
Cervical Cancer Screening	55%	60%	●
Colorectal Cancer Screening	32%	29%	●

APPENDIX:

SPECIFICATIONS AND METHODOLOGY



Data Source:

Virginia All Payer Claims Database

The subsequent report includes paid claims data from Virginia's All Payer Claims Database (APCD), which is administered by Virginia Health Information (VHI) under authority of the Department of Health. The Virginia APCD includes data on roughly 4 - 4.5 million individuals over the course of a given year. This includes nearly all claims paid by Medicaid FFS, Medicare FFS and Medicaid Managed Care plans and 45-55% of commercially insured claims depending on the timeframe. Note that this number excludes Federal Employee Health Plan (FEHP) and TRICARE enrollees. Less than 20% of Medicare Advantage Claims are included. Data for dual eligibles, behavioral health services or Dental claims are also not available from the Virginia APCD.

General Specifications:

Timeframe- 2017 Dates of Service, 2016 Data used for Benchmarking

Insurance Coverage- Commercial, Medicare, Medicaid

Notes for 2017 Report-

- All High Value Measure calculations were generated from Milliman Evidence Based Measures version 8. 2016 Rates, with the exception of HPV vaccination, were also recalculated using EBM 8 and may vary slightly from the version 7 rates displayed within the previous report
- 2016 benchmark data was not available for Breast Cancer Screening as this timeframe did not provide a long enough lookback for the measure to be calculated on Medicare FFS claims, which comprise the majority of the volume for this measure
- The Total Covered Lives/ Per Member Per Year calculation was standardized across the Avoidable ED and % of Total APCD covered lives measures
- All EBM based rates have been calculated only for individuals with primary insurance coverage and FFS enrollment information has been excluded from all Medicaid rates
- The denominator for the Avoidable ED visits per 1,000 Member Months is now displayed using the proper units used within the calculation
- Comprehensive Diabetes Care measures have been added to the 2017 report. 2017 rates for Nephropathy testing are not available as 2017 pharmacy claims data is currently not available for the Medicare FFS population. The numerator for this measure checks for ACE Inhibitor prescriptions and therefore cannot be calculated properly for individuals covered by Medicare FFS
- For all EBM based measures the ending date used for Commercial/Medicaid populations is November and is December for Medicare FFS. This timeframe will be standardized for future reports

Measure	Measure Description	Numerator	Denominator
Breast Cancer Screening	Percentage of women 50-74 years of age who had a mammogram to screen for breast cancer	One or more mammograms during the measurement period or the 15 months prior to the measurement period	Women 52-74 years of age as of the end of the measurement period
Cervical Cancer Screening	Percentage of women 21–64 years of age who were screened for cervical cancer	Women 21–64 years of age who were screened for cervical cancer using either of the following criteria: - Women age 21–64 who had cervical cytology performed every 3 years - Women age 30–64 who had cervical cytology/human papillomavirus (HPV) co-testing performed every 5 years	Women 24-64 years of age as of the end of the measurement year
Childhood Immunization Status: DTaP	Percentage of children two years of age who had four diphtheria, tetanus, and acellular pertussis (DTaP) vaccines by their second birthday	At least four DTaP vaccinations, with different dates of service, on or before the child's second birthday	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: Hepatitis A	Percentage of children two years of age who had one hepatitis A (HepA) vaccine by their second birthday	Either of the following on or before the child's second birthday meet criteria: - At least one hepatitis A vaccination, with a date of service on or before the child's second birthday - History of hepatitis A illness	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: Hepatitis B	Percentage of children two years of age who had three hepatitis B (HepB) vaccine by their second birthday	Any of the following on or before the child's second birthday meet criteria: - At least three hepatitis B vaccinations - One of the three vaccinations can be a newborn hepatitis B vaccination during the eight-day period that begins on the date of birth and ends seven days after the date of birth - History of hepatitis illness	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: HiB	Percentage of children two years of age who had three HiB vaccine by their second birthday	At least three HiB vaccinations, with different dates of service, on or before the child's second birthday	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: Influenza	Percentage of children two years of age who had two influenza (flu) vaccines by their second birthday	At least two influenza vaccinations, with different dates of service, on or before the child's second birthday	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: IPV	Percentage of children two years of age who had three IPV vaccine by their second birthday	At least three IPV vaccinations, with different dates of service, on or before the child's second birthday	Children who turn 2 years of age during the measurement year

Measure	Measure Description	Numerator	Denominator
Childhood Immunization Status: MMR	Percentage of children two years of age who had one measles, mumps, and rubella (MMR) vaccine by their second birthday	Any of the following on or before the child's second birthday meet criteria: <ul style="list-style-type: none"> - At least one MMR vaccination - At least one measles and rubella vaccination and at least one mumps vaccination or history of the illness on the same date of service or on different dates of service - At least one measles vaccination or history of the illness and at least one mumps vaccination or history of the illness and at least one rubella vaccination or history of the illness on the same date of service or on different dates of service 	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: Pneumococcal Conjugate	Percentage of children two years of age who had four pneumococcal conjugate (PCV) vaccines by their second birthday	At least four pneumococcal conjugate vaccinations, with different dates of service, on or before the child's second birthday	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: Rotavirus	Percentage of children two years of age who had two or three rotavirus (RV) vaccines by their second birthday	Any of the following on or before the child's second birthday meet criteria: <ul style="list-style-type: none"> - At least two doses of the two-dose rotavirus vaccine on different dates of service - At least three doses of the three-dose rotavirus vaccine on different dates of service - At least one dose of the two-dose rotavirus vaccine and at least two doses of the three-dose rotavirus vaccine, all on different dates of service 	Children who turn 2 years of age during the measurement year
Childhood Immunization Status: VZV	Percentage of children two years of age who had one chicken pox (VZV) vaccine by their second birthday	Either of the following on or before the child's second birthday meet criteria: <ul style="list-style-type: none"> - At least one VZV vaccination, with a date of service on or before the child's second birthday - History of varicella zoster (e.g., chicken pox) 	Children who turn 2 years of age during the measurement year
Claims in Virginia's All Payer Claims Database	Percent of Virginia Total Covered Lives with Claims Included in the Virginia All Payer Claims Database	Average monthly enrollment for all insurance types within the Virginia APCD	The total number of individuals covered by any type of insurance as obtained from the Kaiser Family Foundation
Claims in Virginia's All Payer Claims Database	Percent of Virginia Commercially Insured Lives with Claims included in the Virginia All Payer Claims Database	Average monthly enrollment for individuals covered by commercial insurance (both group and individual) within the Virginia APCD	The total number of individuals covered by commercial insurance as obtained from the Kaiser Family Foundation

Measure	Measure Description	Numerator	Denominator
Colorectal Cancer Screening	Percentage of members 50-75 years of age who had appropriate screening for colorectal cancer	<p>"One or more screenings for colorectal cancer. Any of the following meet criteria:</p> <ul style="list-style-type: none"> - Fecal occult blood test (FOBT) during the measurement year. For administrative data, assume the required number of samples were returned, regardless of FOBT type - Flexible sigmoidoscopy during the measurement year or the four years prior to the measurement year - Colonoscopy during the measurement year or the nine years prior to the measurement year" 	Members 50-75 years of age as of the end of the measurement year
Don't do imaging for low back pain within the first six weeks, unless red flags are present	Percentage of imaging for low back pain considered to be wasteful	<p>"Instances of imaging for low back pain performed within the first six weeks without any red flags present. Red flags include:</p> <ul style="list-style-type: none"> - Low back pain without improvement after 6 weeks - Severe or progressive neurologic deficits - Back pain in those above 70 years of age - Cauda equina syndrome - Cancer or history of cancer - Fracture - Ankylosing spondylitis - Immunosuppression, diabetes mellitus, and intravenous drug use - Prolonged use of corticosteroids - Osteoporosis - Symptomatic spinal stenosis, and/or infection - When serious underlying conditions are suspected on the basis of history and physical examination <p>"</p>	All instances of imaging for low back pain within the first six weeks on members 18 years of age or greater during the measurement year
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	Percentage of baseline laboratory studies performed 30 days or fewer prior to a low-risk surgery considered to be wasteful	<p>"Instances of baseline laboratory studies in members without significant systemic disease (ASA I or II) performed 30 days or fewer prior to a low-risk surgery</p> <ul style="list-style-type: none"> - ASA I indicates a normal healthy patient (e.g., healthy, non-smoking, no or minimal alcohol use) - ASA II indicates a patient with mild systemic disease (e.g., current smoker, social alcohol drinker, pregnancy, obesity, mild lung disease)" 	All instances of baseline laboratory studies performed 30 days or fewer prior to a low-risk surgery on members 2 years of age or greater

Measure	Measure Description	Numerator	Denominator
Don't obtain EKG, chest X-ray or pulmonary function test in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery	Percentage of EKG, chest X-ray and pulmonary function testing performed 30 days or fewer prior to a low-risk surgery considered to be wasteful	"Instances of EKG, chest X-ray and pulmonary function testing in members without significant systemic disease (ASA I or II) performed 30 days or fewer prior to a low-risk surgery - ASA I indicates a normal healthy patient (e.g., healthy, non-smoking, no or minimal alcohol use) - ASA II indicates a patient with mild systemic disease (e.g., current smoker, social alcohol drinker, pregnancy, obesity, mild lung disease)"	All instances of EKG, chest X-ray and pulmonary function testing performed 30 days or fewer prior to a low-risk surgery on members 2 years of age or greater
Don't perform population based screening for 25-OH-Vitamin-D deficiency	Percentage of population based screenings for 25-OH-Vitamin-D deficiency considered to be wasteful	"Instances of screening for 25-OH-Vitamin-D testing excluding those for members at risk of vitamin-D deficiency. Members at risk of vitamin-D deficiency include: - Members with chronic conditions that require vitamin-D testing, risk factors for vitamin D deficiency, high risk medication for vitamin-D deficiency, pregnancy, obesity, and recent history of falls and traumatic fractures in members aged 65 years and above"	All instances of screening for 25-OH-Vitamin-D testing during the measurement year
Don't perform PSA-based screening for prostate cancer in all men regardless of age	Percentage of PSA-based screenings for prostate cancer in men considered to be wasteful	Instances of PSA-based screening in men without any symptoms. Instances of PSA-based screening in men who have clinical presentations and risk factors for prostate cancer are considered likely wasteful as some of the risk factors (e.g., two or more first-degree relatives with prostate cancer before age 65, black ancestry) cannot be determined through claims data	All instances of PSA-based screening for prostate cancer in men during the measurement year
Hemoglobin A1c (HbA1c) Testing	Percent of adult diabetics with an HbA1c test	Number of individuals within the denominator with an HbA1c test performed during the measurement year	Individuals 18-75 years of age with diabetes (type 1 and type 2) with no more than one gap in enrollment of up to 45 days within the 180 days of the numerator qualifying event
Immunizations for Adolescents: HPV Vaccine	Percentage of adolescents 13 years of age who had three doses of the human papillomavirus (HPV) vaccine by their 13th birthday	Three HPV vaccines, with different dates of service, on or between the member's 9th and 13th birthdays	Adolescents who turn 13 years of age during the measurement year
Immunizations for Adolescents: Meningococcal Conjugate Vaccine	Percentage of adolescents 13 years of age who had one dose of meningococcal conjugate vaccine by their 13th birthday	One meningococcal conjugate vaccine on or between the member's 11th and 13th birthdays	Adolescents who turn 13 years of age during the measurement year

Measure	Measure Description	Numerator	Denominator
Immunizations for Adolescents: Tdap Vaccine	Percentage of adolescents 13 years of age who had one tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap) by their 13th birthday	One tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap) on or between the member's 10th and 13th birthdays	Adolescents who turn 13 years of age during the measurement year
Medical Attention for Nephropathy	Percent of adult diabetes receiving medical attention for nephropathy	Number of individuals within the denominator with a nephropathy screening or monitoring test or evidence of nephropathy	Individuals 18-75 years of age with diabetes (type 1 and type 2) with no more than one gap in enrollment of up to 45 days within the 180 days of the numerator qualifying event
Potentially Avoidable ED Visits - As a Percentage of Total ED Visits	Potentially avoidable ED visits as a percentage of total ED visits	Potentially avoidable ED visits	ED visits overall
Potentially Avoidable ED Visits - Per 1,000 Member Months	Potentially avoidable ED visits per 1,000 member months	Potentially avoidable ED visits	Total medical member months/1,000
Potentially Avoidable ED Visits - Per Member Per Year	Potentially avoidable ED visits per member per year	Potentially avoidable ED visits	Total medical member months/12
Prevention Quality Indicator #90: Prevention Quality Overall Composite Rate (per 100,000 population)	Prevention Quality Indicators (PQI) overall composite per 100,000 population, ages 18 years and older	Discharges, for patients ages 18 years and older, that meet the inclusion and exclusion rules for the numerator in any of the following PQIs: - PQI #1 Diabetes Short-Term Complications Admission Rate - PQI #3 Diabetes Long-Term Complications Admission Rate - PQI #5 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate - PQI #7 Hypertension Admission Rate - PQI #8 Heart Failure Admission Rate - PQI #10 Dehydration Admission Rate - PQI #11 Bacterial Pneumonia Admission Rate - PQI #12 Urinary Tract Infection Admission Rate - PQI #14 Uncontrolled Diabetes Admission Rate - PQI #15 Asthma in Younger Adults Admission Rate - PQI #16 Lower-Extremity Amputation among Patients with Diabetes Rate	Members 18 years of age or older as of the end of the measurement year

