

## 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 about 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 will receive data on how much payment reform there is in the state and of what type. Scorecard 2.0 will also look 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 will then feed into the larger Virginia Health Value Dashboard work.

| Legend |
| :---: |
| - |
| $=$ Better than statewide rate |
| = Same as 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 | 13\% | - | - | $\bullet$ | $\bullet$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 3.2 | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Potentially Avoidable ED Visits - Per Member Per Year | 0.04 | $\bullet$ | - | $\bullet$ | $\bullet$ | $\bullet$ |
| 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
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
Don't perform population based screening for 25-OH-Vitamin D deficiency Don't perform PSA-based screening for prostate cancer in all men regardless of age
Don't do imaging for low back pain within the first six weeks, unless red flags are present
Inappropriate Preventable Hospital Stays
Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population)

## INCREASING HIGH VALUE CARE

Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules

| Childhood Immunization Status: DTaP | 55\% | - | - | - | $\bullet$ | $\bullet$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Childhood Immunization Status: Influenza | 47\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | - |
| Childhood Immunization Status: Hepatitis A | 78\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bigcirc$ |
| Childhood Immunization Status: Hepatitis B | 24\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Childhood Immunization Status: HiB | 72\% | $\bullet$ | $\bullet$ | $\bullet$ | - | $\bullet$ |
| Childhood Immunization Status: IPV | 66\% | $\bullet$ | $\bullet$ | - | $\bullet$ | $\bullet$ |
| Childhood Immunization Status: MMR | 81\% | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Childhood Immunization Status: Pneumococcal Conjugate | 56\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Childhood Immunization Status: Rotavirus | 55\% | - | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Childhood Immunization Status: VZV | 81\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 16\% | $\bullet$ | $\bullet$ | - | $\bullet$ | $\bullet$ |
| Immunizations for Adolescents: HPV Vaccine | 14\% | - | $\bullet$ | - | - | - |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 56\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| Immunizations for Adolescents: Tdap Vaccine | 74\% | $\bullet$ | $\bullet$ | - | - | - |

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\% | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cervical Cancer Screening | 53\% | $\bullet$ | - | - | $\bullet$ | $\bullet$ |
| Colorectal Cancer Screening | 27\% | - | - | $\bullet$ | - | $\bullet$ |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Rate |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 204,112 | 1,525,336 | 13\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 204,112 | 63,466 | 3.2 |
| Potentially Avoidable ED Visits - Per Member Per Year | 204,112 | 5,288,861 | 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 | 417,580 | 504,827 | 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 | 32,518 | 426,836 | 8\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 123,950 | 487,412 | 25\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 203,230 | 270,514 | 75\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 31,670 | 41,304 | 77\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 79,463 | 3,678,939 | 2,160 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 19,868 | 36,394 | 55\% |
| Childhood Immunization Status: Influenza | 17,054 | 36,394 | 47\% |
| Childhood Immunization Status: Hepatitis A | 28,389 | 36,394 | 78\% |
| Childhood Immunization Status: Hepatitis B | 8,668 | 36,394 | 24\% |
| Childhood Immunization Status: HiB | 26,137 | 36,394 | 72\% |
| Childhood Immunization Status: IPV | 23,940 | 36,394 | 66\% |
| Childhood Immunization Status: MMR | 29,627 | 36,394 | 81\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 20,454 | 36,394 | 56\% |
| Childhood Immunization Status: Rotavirus | 20,071 | 36,394 | 55\% |
| Childhood Immunization Status: VZV | 29,513 | 36,394 | 81\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 3,059 | 18,933 | 16\% |
| Immunizations for Adolescents: HPV Vaccine | 5,538 | 39,553 | 14\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 22,083 | 39,553 | 56\% |
| Immunizations for Adolescents: Tdap Vaccine | 29,185 | 39,553 | 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 | 126,565 | 223,390 | 57\% |
| Cervical Cancer Screening | 257,202 | 483,930 | 53\% |
| Colorectal Cancer Screening | 327,238 | 1,191,337 | 27\% |
| IMPROVING THE INFRASTRUCTURE FOR VALUE BASED CARE | Numerator | Denominator | Rate |
| Value-Oriented Payments that Place Doctors and Hospitals at Financial Risk for Performance | See CPR Scorecard 2.0 |  |  |
| Percentage of Commercial In-Network Payments that are Value-Oriented | See CPR Scorecard 2.0 |  |  |
| Percent of Virginia Total Covered Lives with Claims Included in the Virginia All Payer Claims Database | 4,310,742 | 7,361,200 | 59\% |
| Percent of Virginia Commercially Insured Lives with Claims included in the Virginia All Payer Claims Database | 2,005,487 | 4,891,600 | 41\% |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Rate |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 28,547 | 243,440 | 12\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 28,547 | 9,860 | 2.9 |
| Potentially Avoidable ED Visits - Per Member Per Year | 28,547 | 821,634 | 0.03 |
| 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 | 68,387 | 82,054 | 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 | 5,138 | 67,687 | 8\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 18,801 | 77,672 | 24\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 31,415 | 43,065 | 73\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 4,644 | 6,251 | 74\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 14,768 | 577,299 | 2,558 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 2,981 | 5,541 | 54\% |
| Childhood Immunization Status: Influenza | 2,508 | 5,541 | 45\% |
| Childhood Immunization Status: Hepatitis A | 4,012 | 5,541 | 72\% |
| Childhood Immunization Status: Hepatitis B | 1,522 | 5,541 | 27\% |
| Childhood Immunization Status: HiB | 3,761 | 5,541 | 68\% |
| Childhood Immunization Status: IPV | 3,492 | 5,541 | 63\% |
| Childhood Immunization Status: MMR | 4,314 | 5,541 | 78\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 3,061 | 5,541 | 55\% |
| Childhood Immunization Status: Rotavirus | 3,051 | 5,541 | 55\% |
| Childhood Immunization Status: VZV | 4,244 | 5,541 | 77\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 421 | 2,871 | 15\% |
| Immunizations for Adolescents: HPV Vaccine | 748 | 5,938 | 13\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 2,946 | 5,938 | 50\% |
| Immunizations for Adolescents: Tdap Vaccine | 4,280 | 5,938 | 72\% |
| 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 | 16,360 | 31,144 | 53\% |
| Cervical Cancer Screening | 34,656 | 68,246 | 51\% |
| Colorectal Cancer Screening | 49,309 | 189,955 | 26\% |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Rate |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 28,207 | 254,248 | 11\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 28,207 | 16,748 | 1.7 |
| Potentially Avoidable ED Visits - Per Member Per Year | 28,207 | 1,395,646 | 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 | 94,030 | 109,794 | 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 | 13,717 | 82,435 | 17\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 60,242 | 146,953 | 41\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 53,041 | 65,836 | 81\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 6,091 | 8,349 | 73\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 11,277 | 958,921 | 1,176 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 5,778 | 10,282 | 56\% |
| Childhood Immunization Status: Influenza | 5,694 | 10,282 | 55\% |
| Childhood Immunization Status: Hepatitis A | 8,543 | 10,282 | 83\% |
| Childhood Immunization Status: Hepatitis B | 2,601 | 10,282 | 25\% |
| Childhood Immunization Status: HiB | 7,325 | 10,282 | 71\% |
| Childhood Immunization Status: IPV | 6,855 | 10,282 | 67\% |
| Childhood Immunization Status: MMR | 8,492 | 10,282 | 83\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 5,834 | 10,282 | 57\% |
| Childhood Immunization Status: Rotavirus | 5,903 | 10,282 | 57\% |
| Childhood Immunization Status: VZV | 8,462 | 10,282 | 82\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 1,012 | 4,974 | 20\% |
| Immunizations for Adolescents: HPV Vaccine | 1,897 | 10,523 | 18\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 6,592 | 10,523 | 63\% |
| Immunizations for Adolescents: Tdap Vaccine | 7,702 | 10,523 | 73\% |

## 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 | 39,296 | 58,350 | $67 \%$ |
| :--- | :--- | :---: | :---: |
| Cervical Cancer Screening | 76,090 | 108,870 | $70 \%$ |
| Colorectal Cancer Screening | 90,077 | 273,022 | $33 \%$ |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Re |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 46,909 | 334,774 | 14\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 46,909 | 11,908 | 3.9 |
| Potentially Avoidable ED Visits - Per Member Per Year | 46,909 | 992,338 | 0.05 |
| Low Value Services as Captured by the Medlnsight Health Waste Calculator |  |  |  |
| Don't obtain baseline laboratory studies in patients without significant systemic diseas (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 | 82,151 | 99,957 | 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 | 4,472 | 99,064 | 5\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 13,147 | 80,567 | 16\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 35,440 | 46,620 | 76\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 6,020 | 7,993 | 75\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 21,428 | 732,566 | 2,925 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 3,347 | 6,235 | 54\% |
| Childhood Immunization Status: Influenza | 2,513 | 6,235 | 40\% |
| Childhood Immunization Status: Hepatitis A | 4,830 | 6,235 | 77\% |
| Childhood Immunization Status: Hepatitis B | 2,520 | 6,235 | 40\% |
| Childhood Immunization Status: HiB | 4,430 | 6,235 | 71\% |
| Childhood Immunization Status: IPV | 4,116 | 6,235 | 66\% |
| Childhood Immunization Status: MMR | 5,120 | 6,235 | 82\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 3,533 | 6,235 | 57\% |
| Childhood Immunization Status: Rotavirus | 3,636 | 6,235 | 58\% |
| Childhood Immunization Status: VZV | 5,136 | 6,235 | 82\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 540 | 3,337 | 16\% |
| Immunizations for Adolescents: HPV Vaccine | 932 | 7,000 | 13\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 3,537 | 7,000 | 51\% |
| Immunizations for Adolescents: Tdap Vaccine | 5,207 | 7,000 | 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 | 19,092 | 42,919 | 44\% |
| Cervical Cancer Screening | 39,220 | 93,499 | 42\% |
| Colorectal Cancer Screening | 55,693 | 256,997 | 22\% |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Rate |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 45,846 | 309,597 | 15\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 45,846 | 11,225 | 4.1 |
| Potentially Avoidable ED Visits - Per Member Per Year | 45,846 | 935,409 | 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 | 71,436 | 90,012 | 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 | 4,095 | 81,016 | 5\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 14,426 | 68,839 | 21\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 40,574 | 56,929 | 71\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 7,789 | 9,347 | 83\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 14,480 | 657,728 | 2,202 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 3,249 | 6,607 | 49\% |
| Childhood Immunization Status: Influenza | 2,838 | 6,607 | 43\% |
| Childhood Immunization Status: Hepatitis A | 4,937 | 6,607 | 75\% |
| Childhood Immunization Status: Hepatitis B | 1,117 | 6,607 | 17\% |
| Childhood Immunization Status: HiB | 4,733 | 6,607 | 72\% |
| Childhood Immunization Status: IPV | 4,030 | 6,607 | 61\% |
| Childhood Immunization Status: MMR | 5,291 | 6,607 | 80\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 3,453 | 6,607 | 52\% |
| Childhood Immunization Status: Rotavirus | 3,239 | 6,607 | 49\% |
| Childhood Immunization Status: VZV | 5,296 | 6,607 | 80\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 438 | 3,542 | 12\% |
| Immunizations for Adolescents: HPV Vaccine | 805 | 7,354 | 11\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 3,937 | 7,355 | 54\% |
| Immunizations for Adolescents: Tdap Vaccine | 5,296 | 7,354 | 72\% |
| 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 | 24,562 | 44,108 | 56\% |
| Cervical Cancer Screening | 48,989 | 97,791 | 50\% |
| Colorectal Cancer Screening | 58,810 | 219,294 | 27\% |


| REDUCING LOW VALUE CARE | Numerator | Denominator | Rate |
| :---: | :---: | :---: | :---: |
| Utilization and Cost of Avoidable Emergency Room Visits |  |  |  |
| Potentially Avoidable ED Visits - As a Percentage of Total ED Visits | 53,564 | 376,117 | 14\% |
| Potentially Avoidable ED Visits - Per 1,000 Member Months | 53,564 | 13,465 | 4.0 |
| Potentially Avoidable ED Visits - Per Member Per Year | 53,564 | 1,122,074 | 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 | 101,576 | 123,010 | 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 | 5,096 | 96,634 | 5\% |
| Don't perform population based screening for 25-OH-Vitamin D deficiency | 17,334 | 113,381 | 15\% |
| Don't perform PSA-based screening for prostate cancer in all men regardless of age | 42,760 | 58,064 | 74\% |
| Don't do imaging for low back pain within the first six weeks, unless red flags are present | 7,126 | 9,364 | 76\% |
| Inappropriate Preventable Hospital Stays |  |  |  |
| Prevention Quality Indicator \#90: Prevention Quality Overall Composite Rate (per 100,000 population) | 17,510 | 752,425 | 2,327 |
| INCREASING HIGH VALUE CARE | Numerator | Denominator | Rate |
| Virginia Children and Adolescents who are Current with Appropriate Vaccination Schedules |  |  |  |
| Childhood Immunization Status: DTaP | 4,513 | 7,729 | 58\% |
| Childhood Immunization Status: Influenza | 3,501 | 7,729 | 45\% |
| Childhood Immunization Status: Hepatitis A | 6,067 | 7,729 | 78\% |
| Childhood Immunization Status: Hepatitis B | 908 | 7,729 | 12\% |
| Childhood Immunization Status: HiB | 5,888 | 7,729 | 76\% |
| Childhood Immunization Status: IPV | 5,447 | 7,729 | 70\% |
| Childhood Immunization Status: MMR | 6,410 | 7,729 | 83\% |
| Childhood Immunization Status: Pneumococcal Conjugate | 4,573 | 7,729 | 59\% |
| Childhood Immunization Status: Rotavirus | 4,242 | 7,729 | 55\% |
| Childhood Immunization Status: VZV | 6,375 | 7,729 | 82\% |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | 648 | 4,209 | 15\% |
| Immunizations for Adolescents: HPV Vaccine | 1,156 | 8,738 | 13\% |
| Immunizations for Adolescents: Meningococcal Conjugate or Meningococcal Polysaccharide Vaccine | 5,071 | 8,738 | 58\% |
| Immunizations for Adolescents: Tdap Vaccine | 6,700 | 8,738 | 77\% |
| 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 | 27,255 | 46,869 | 58\% |
| Cervical Cancer Screening | 58,247 | 115,524 | 50\% |
| Colorectal Cancer Screening | 73,349 | 252,069 | 29\% |

## METHODOLOGY

| 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: <br> - Women age 21-64 who had cervical cytology performed every 3 years <br> - 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: <br> - At least one hepatitis A vaccination, with a date of service on or before the child's second birthday <br> - 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: <br> - At least three hepatitis B vaccinations <br> - 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 <br> - 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: <br> - At least one MMR vaccination <br> - 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 <br> - 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: <br> - At least two doses of the twodose rotavirus vaccine on different dates of service <br> - At least three doses of the threedose rotavirus vaccine on different dates of service <br> - 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: <br> - 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 enrollement 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 | One or more screenings for colorectal cancer. Any of the following meet criteria: <br> - 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 <br> - 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 | Instances of imaging for low back pain performed within the first six weeks without any red flags present. Red flags include: <br> - Low back pain without improvement after 6 weeks <br> - Severe or progressive neurologic deficits <br> - Back pain in those above 70 years of age <br> - Cauda equina syndrome <br> - Cancer or history of cancer <br> - Fracture <br> - Ankylosing spondylitis <br> - Immunosuppression, diabetes mellitus, and intravenous drug use <br> - Prolonged use of corticosteroids <br> - Osteoporosis <br> - Symptomatic spinal stenosis, and/or infection <br> - When serious underlying conditions are suspected on the basis of history and physical examination | 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 | 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 <br> - ASA I indicates a normal healthy patient (e.g., healthy, nonsmoking, no or minimal alcohol use) <br> - 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 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 $25-\mathrm{OH}-$ Vitamin-D testing excluding those for members at risk of vitamin-D deficiency. Members at risk of vitamin-D deficiency include: <br> - 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 |
| Human Papillomavirus Virus (HPV) Vaccine for Female Adolescents | Percentage of female adolescents 13 years of age who had three doses of the human papillomavirus (HPV) vaccine by their 13th birthday | At least three HPV vaccinations, with different dates of service, on or between the member's 9th and 13th birthdays | Female adolescents who turn 13 years of age during the measurement year |
| Immunizations for Adolescents: HPV Vaccine | Percentage of adolescents 13 years of age who had three doses of the human papillovirus (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 |
| 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 |
| Percentage of Commercial In-Network Payments that are Value-Oriented | See CPR Scorecard 2.0 |  |  |
| Percentage of Patients 18-75 Years of Age with Diabetes who had a Nephropathy Screening | Coming in 2019 |  |  |


| Measure | Measure Description | Numerator | Denominator |
| :---: | :---: | :---: | :---: |
| Percentage of Patients 18-75 Years of Age with Diabetes who had HbA1c Screening During the Measurement Year (HEDIS=1 year) | See CPR Scorecard |  |  |
| Potentially Avoidable ED Visits As a Percentage of Total ED Visits | 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 | 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 | 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: <br> - 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 <br> - PQI \#7 Hypertension Admission Rate <br> - PQI \#8 Heart Failure Admission Rate <br> - PQI \#10 Dehydration Admission Rate <br> - PQI \#11 Bacterial Pneumonia <br> Admission Rate <br> - PQI \#12 Urinary Tract Infection <br> Admission Rate <br> - PQI \#14 Uncontrolled Diabetes Admission Rate <br> - PQI \#15 Asthma in Younger <br> Adults Admission Rate <br> - PQI \#16 Lower-Extremity <br> Amputation among Patients with <br> Diabetes Rate | Members 18 years of age or older as of the end of the measurement year |
| Value-Oriented Payments that Place Doctors and Hospitals at Financial Risk for Performance | See CPR Scorecard 2.0 |  |  |

