

Metrics to Reflect the Health and Well Being of the People of Virginia

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State Health Commissioner

October 7, 2015

Health Care Cost: Background

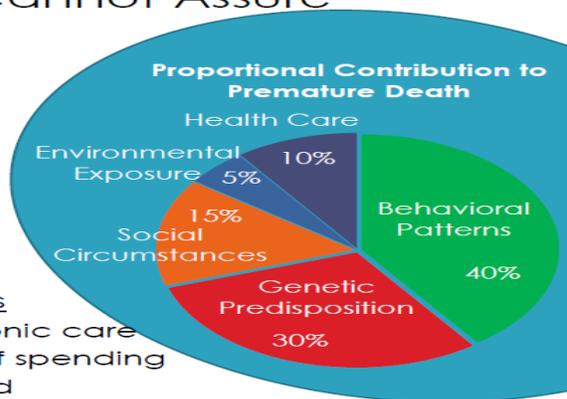
Excellent Health Care Cannot Assure an Individual's Health

Health Is Influenced by 5 Factors

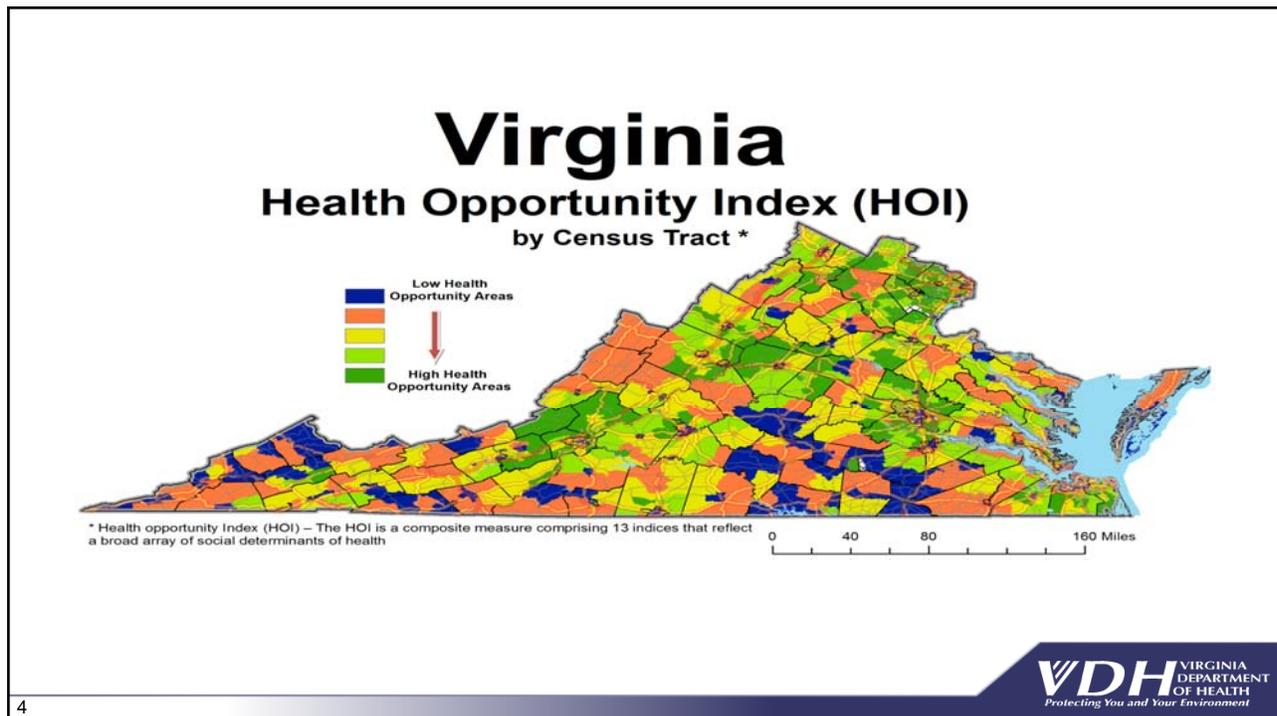
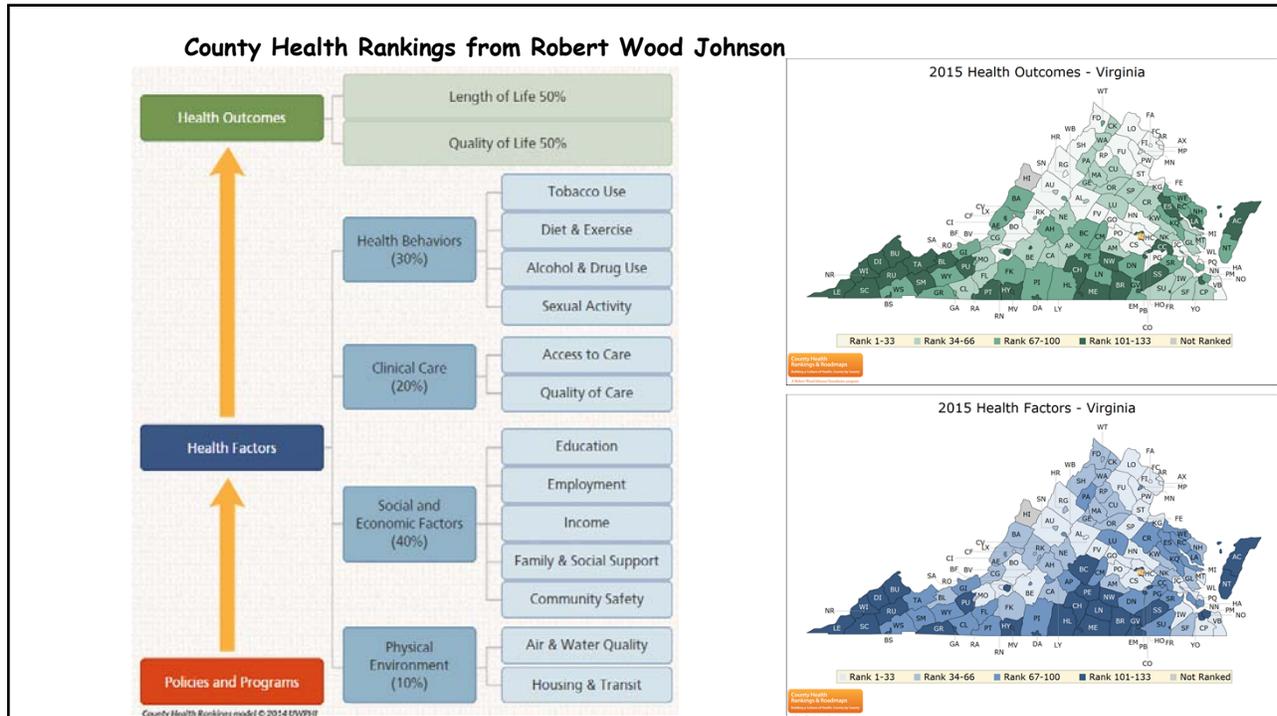
- Genetic predisposition
- Social circumstances
- Environmental exposures
- Behavioral patterns, and
- Health care

U.S. Health Care Expenditure Facts

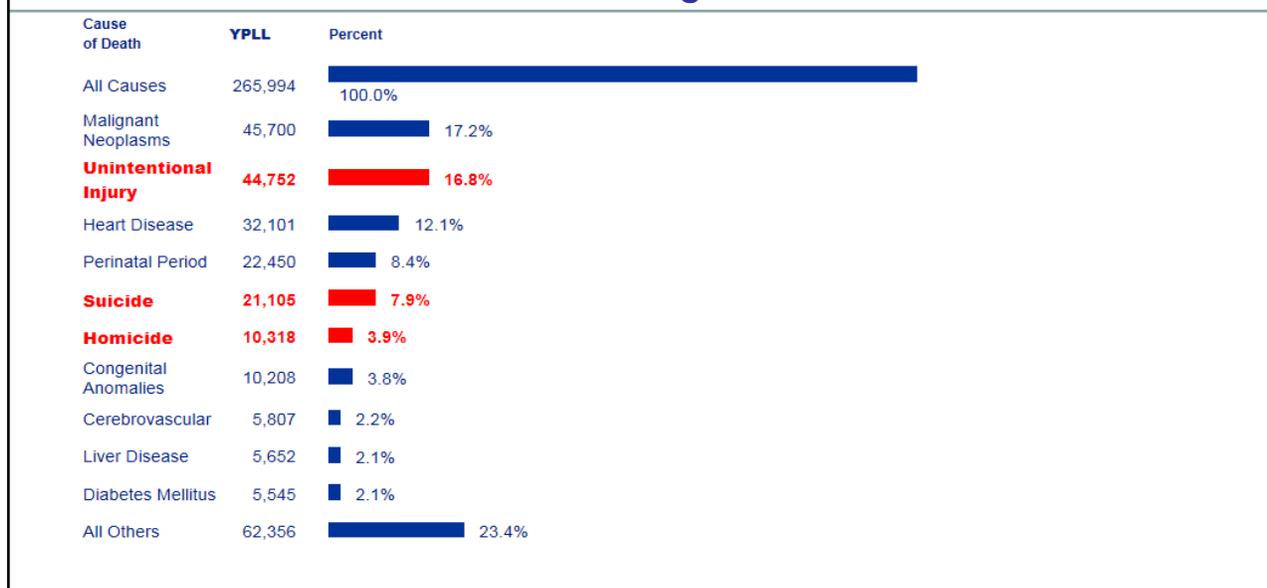
- 75% of expenditures related to chronic care
- 5% of individuals account for 50% of spending
- 3.5% is spent toward prevention and public health services



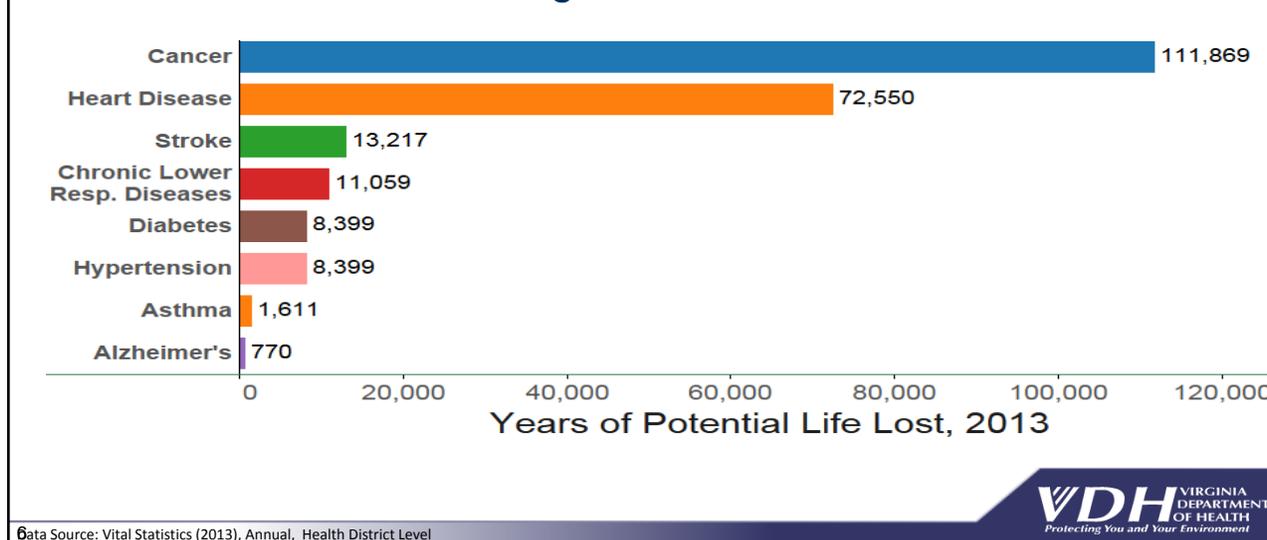
Sources: Steven A. Schroeder M.D., We Can Do Better-Improving the Health of American People, N Engl J Med 2007; 357:1221-8. GAO, Preventive Health Activities, December 2012 at <http://www.gao.gov/assets/6/60/650617.pdf>, and American Public Health Association, Issue Brief: The Prevention and Public Health Fund, July 2012 at http://www.apha.org/NR/rdonlyres/8FA13774-AA47-43F2-838B-1B0757D111C6/0/APHA_PrevFundBrief_June2012.pdf.



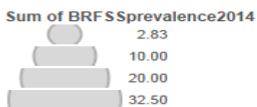
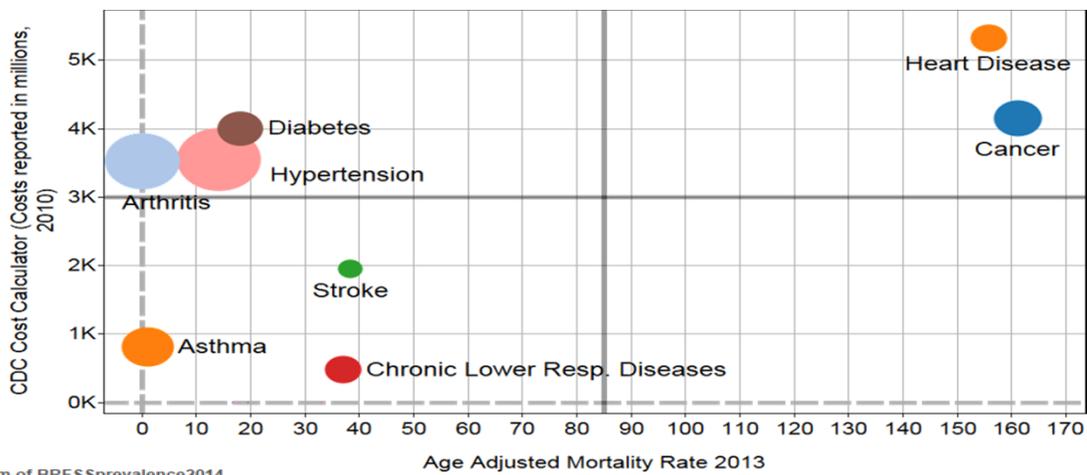
Years of Potential Life Lost Before Age 65 All Causes, Virginia, 2013



Years of Potential Life Lost Before Age 75 Chronic Diseases Virginia, 2013



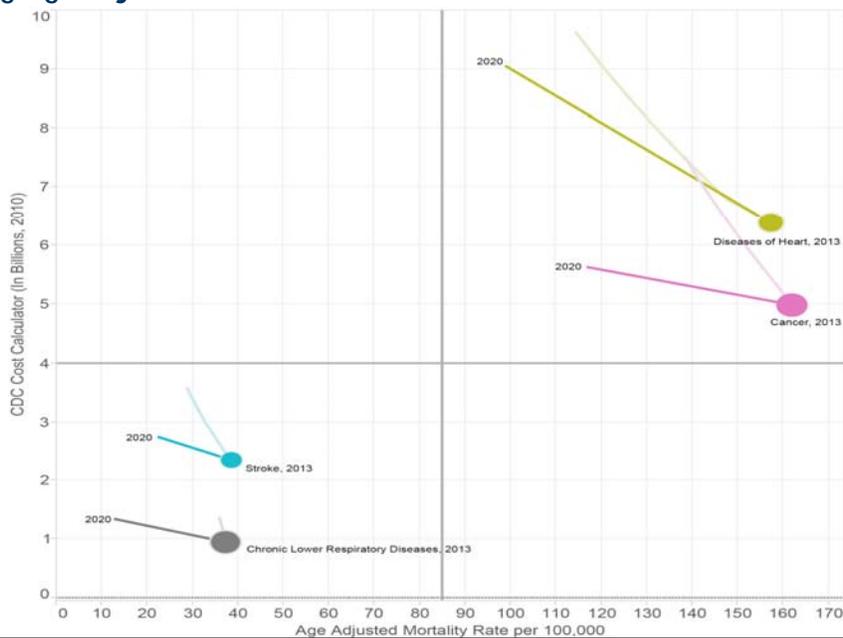
Prevalence, Number of Deaths, and Hospitalization Costs of Chronic Diseases, 2013



Data Sources: Vital Statistics (2013), Behavior Risk Factor Surveillance System (2013), CDC Cost Calculator (2013)



Changing Trajectories To Become the Healthiest State in the Nation



VITAL SIGNS
Core Metrics for Health and Health Care Progress

Community Engagement, Life Expectancy, Well-being, Overweight & Obesity, Addictive Behavior, Unintended Pregnancy, Healthy Communities, Preventive Services, Care Access, Patient Safety, Evidence-Based Care, Care Match with Patient Goals, Individual Spending Burden, Population Spending Burden, Individual Engagement

<http://www.nap.edu/read/19402/chapter/1>

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

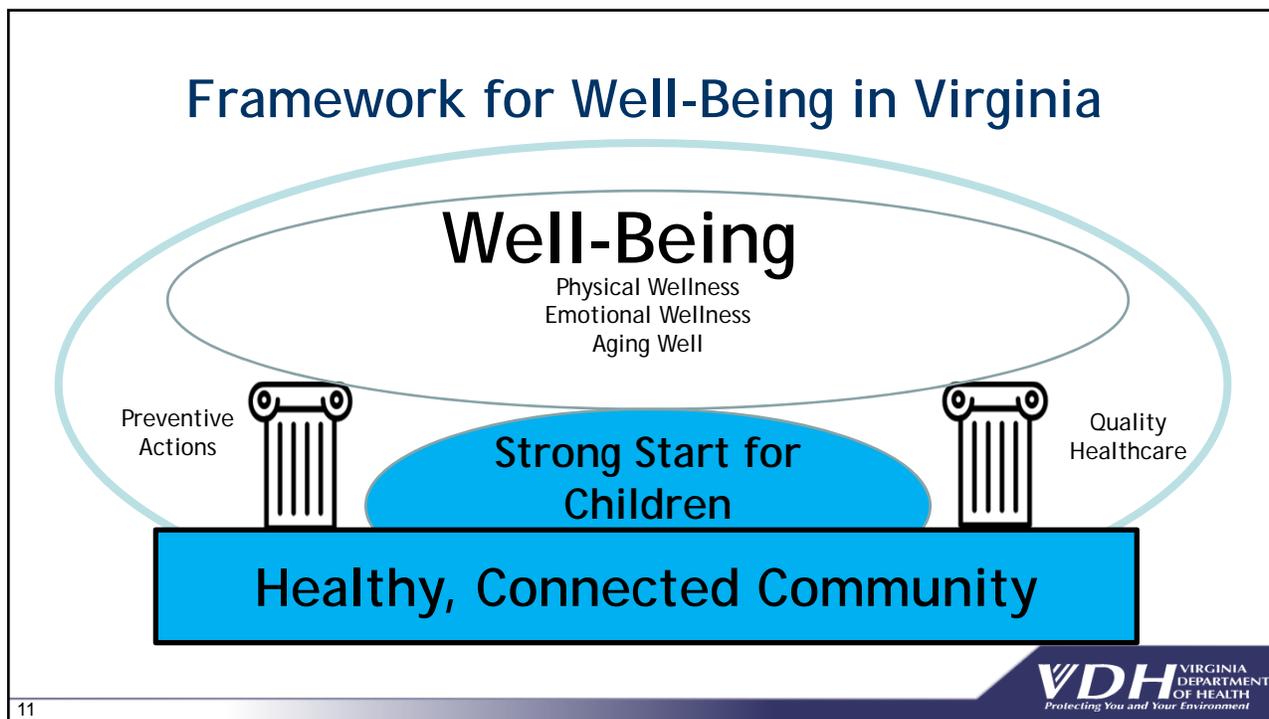
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Vision:

Virginia is the Healthiest State in the Nation

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Plan for Well Being Metrics

<p><u>HEALTHY, CONNECTED COMMUNITIES</u></p> <ul style="list-style-type: none"> Consumer Opportunity Profile Economic Opportunity Profile Percent of the Commonwealth Connected via a Statewide Health Information Exchange <p><u>STRONG START FOR CHILDREN</u></p> <ul style="list-style-type: none"> Teen Pregnancy Rate Preterm Birth Rate Thriving Infant Rate Childhood Obesity/Overweight Rate Percentage of Children in Kindergarten Not Meeting PALS K Benchmarks and Requiring Literacy Interventions Percent of Third Graders Who Passed the SOL Third Grade Reading Assessment <p><u>QUALITY HEALTHCARE</u></p> <ul style="list-style-type: none"> Avoidable Hospital Stays Percent of Adults Who Report Having a Regular Healthcare Provider Percent of Hospitals Meeting Virginia's Goal for Prevention of Hospital-onset <i>Clostridium difficile</i> Infections Cost of Healthcare 	<p><u>PREVENTIVE ACTIONS</u></p> <ul style="list-style-type: none"> Percent of Children Aged 19-35 Months Who Received the Recommended Vaccines Percent of Girls/Boys Aged 13-17 Who Received Three Doses of Human Papilloma Virus (HPV) Vaccine Percent of Adults 18 Years and Older Who Received an Annual Influenza Vaccination Percent of Females Aged 50 to 74 Years Who Received Breast Cancer Screening Percent of Adults Aged 50 to 75 Years Who Received Colorectal Cancer Screening Percent of Virginian Adults (18 years old and up) Who Report Using Tobacco <p><u>WELL BEING: PHYSICAL & EMOTIONAL WELLNESS; AGING WELL</u></p> <ul style="list-style-type: none"> Percent of Adults Who Reported One or More Days of Poor Health That Kept Them from Doing Usual Activities Percent of Adults Who Did Not Participate In Any Physical Activities Other Than Their Regular Job during the Past 30 Days Rate of Injury Hospitalization Rate of Mental Health and Substance Use Disorder Hospitalization in Adults Life Expectancy
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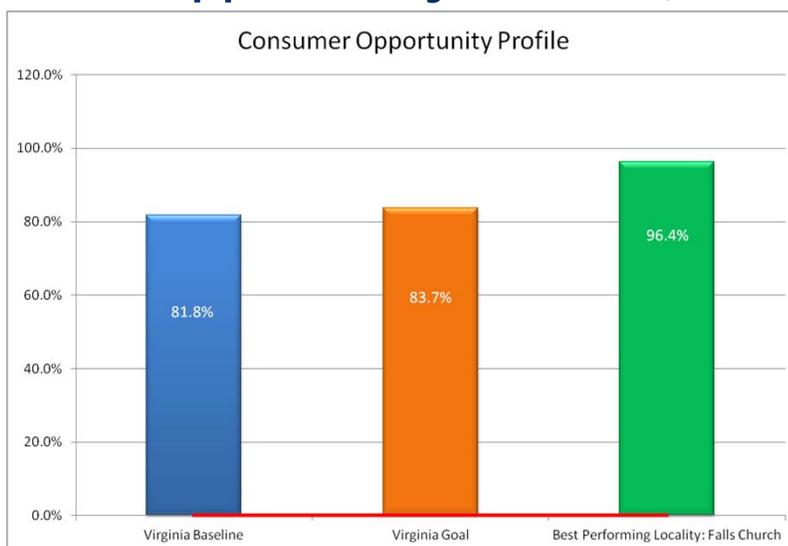
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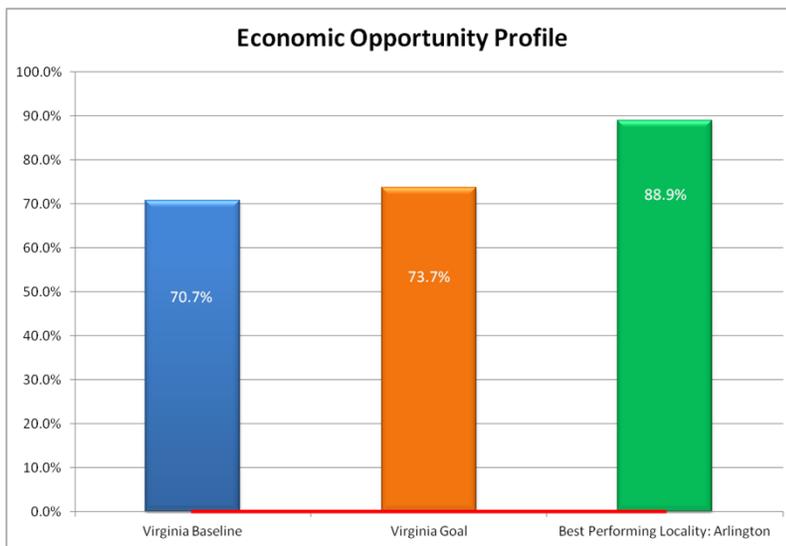
Healthy, Connected Communities

Short Horizon Metrics	→ Long Horizon Metrics
Consumer Opportunity Profile	Full Health Opportunity Index <ul style="list-style-type: none"> • Includes environmental issues • Add measure of social capital, connectedness to index
Economic Opportunity Profile	
Percent of the Commonwealth Providers Connected via a Statewide Health Information Exchange	<ul style="list-style-type: none"> • Broadband and cell phone connectivity/coverage • Other connectivity metrics

Consumer Opportunity Profile (No Trend Data)

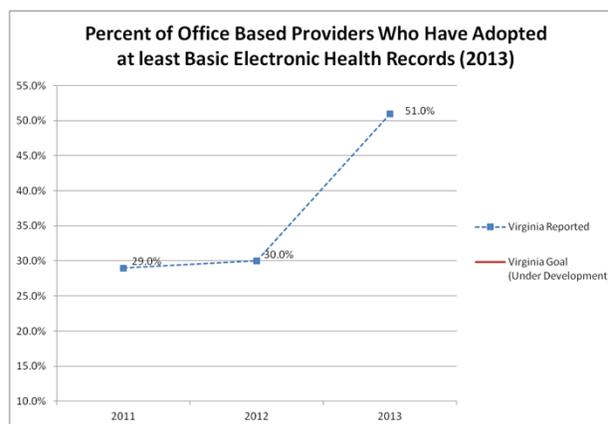
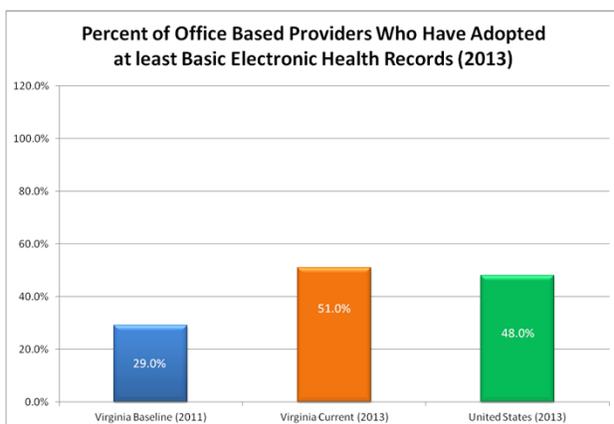


Economic Opportunity Profile (No Trend Data)



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Office Based Providers with at least a Basic Electronic Health Record System



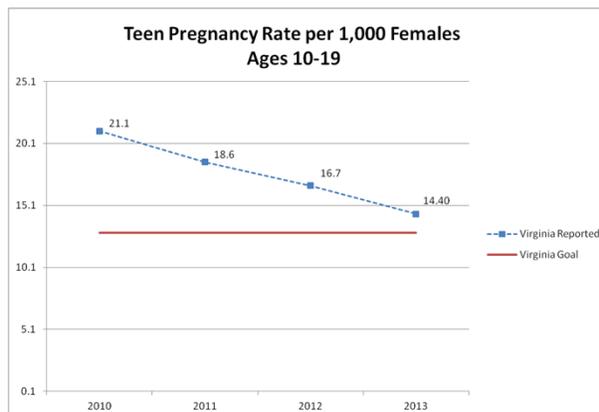
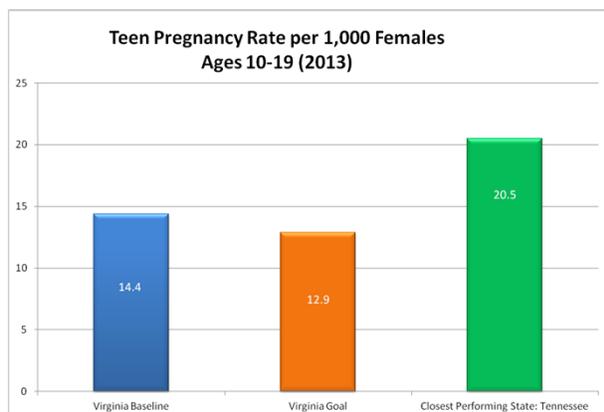
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Strong Start for Children

Short Horizon Metrics	→	Long Horizon Metrics
Teen Pregnancy Rate		Measure of Well-Being in Graduating HS students
Preterm Birth Rate		Neonates born at full term
Thriving Infant Rate		Thriving Infant Rate

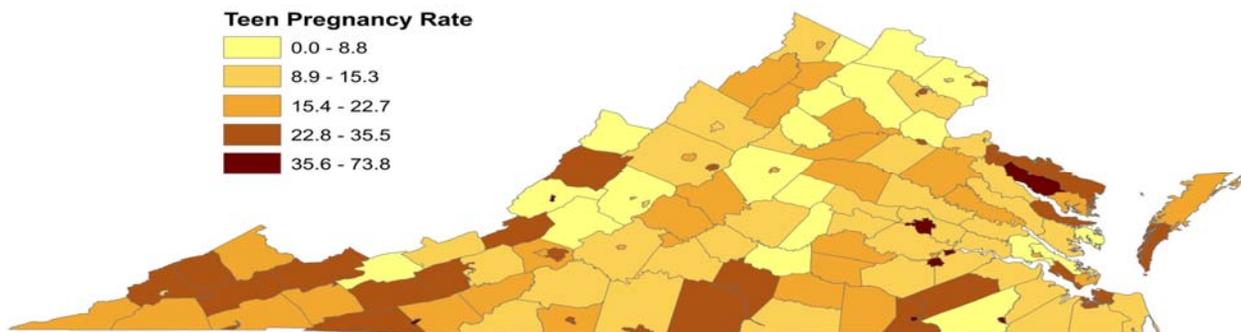
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Teen Pregnancy Rate Ages 10-19



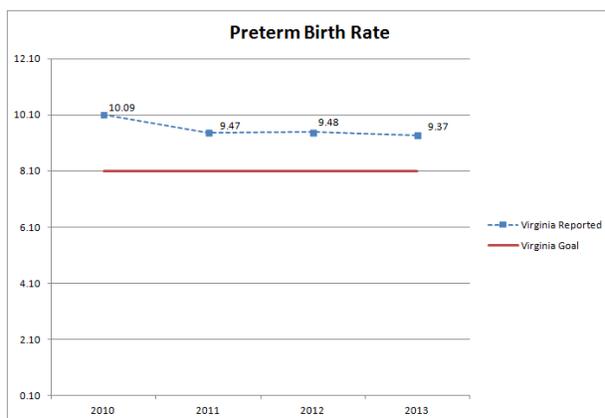
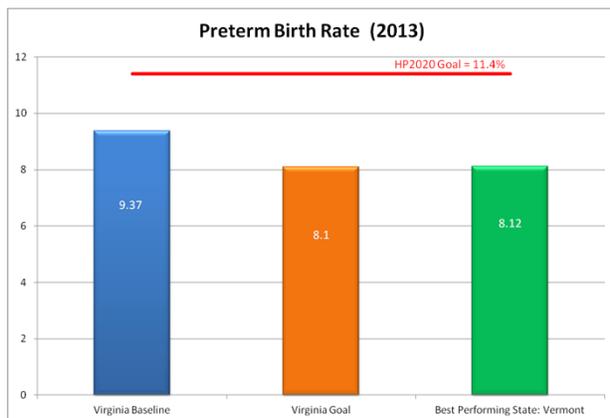
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Virginia Teen (ages 10-19yrs) Pregnancy Rate, 2013

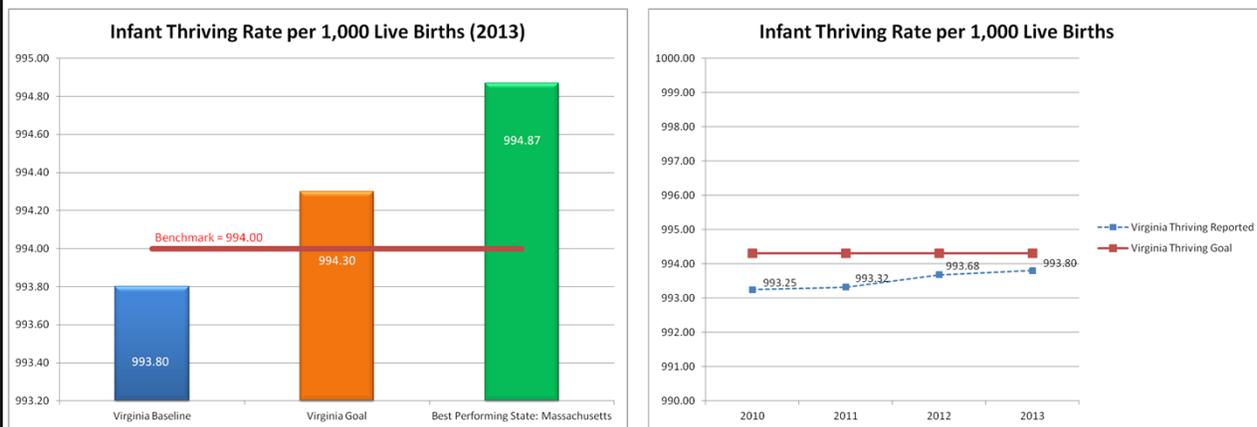


Source: VDH Division of Health Statistics, compiled by the Division of Policy & Evaluation, Office of Family Health Services

Preterm Birth Rate



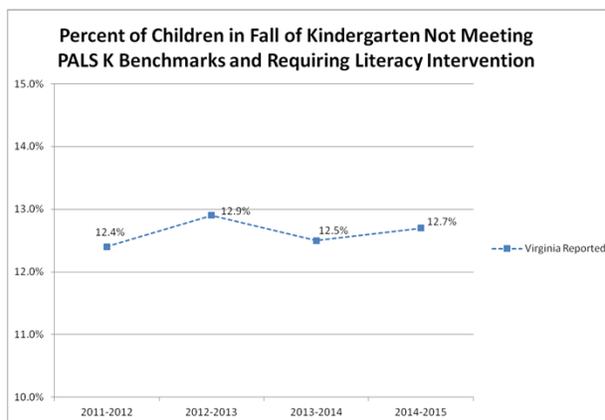
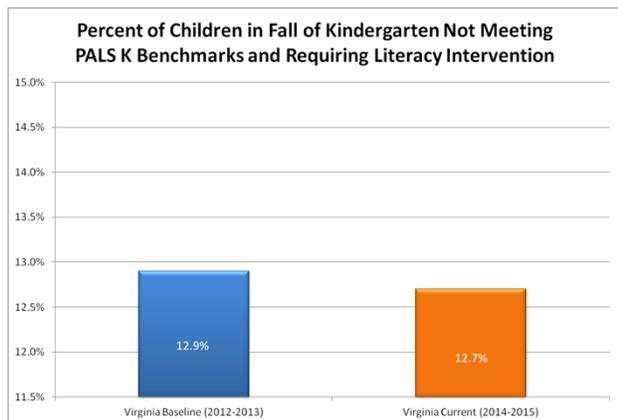
Infant Thriving Rate



Strong Start for Children

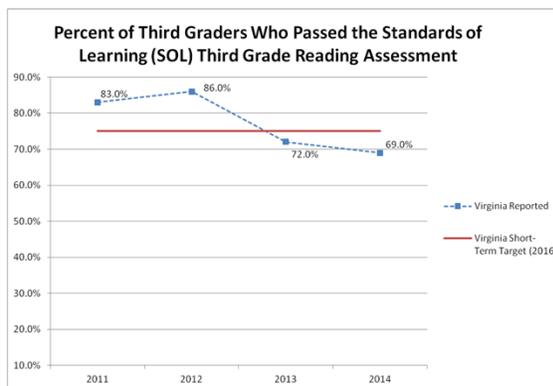
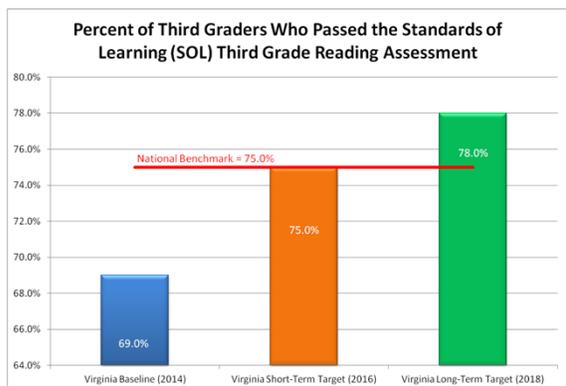
Short Horizon Metrics	Long Horizon Metrics
<p>Childhood Overweight/Obesity Rates</p> <p><i>Source: YRBS Self Report or School Reports</i></p>	<p>Children At Healthy Weight at Key Milestones</p>
<p>Percent of Children in Fall of Kindergarten Not Meeting PALS K Benchmarks</p>	<p>Percent Attaining Kindergarten Reading Benchmarks</p>
<p>Percent of Third Graders Who Passed the SOL Reading Assessment</p>	<p>Same</p>

Percent of Kindergarten Children Not Meeting PALS K Benchmarks and Requiring Literacy Intervention



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Percent of Third Graders Who Passed the Standards of Learning (SOL) Third Grade Reading Assessment

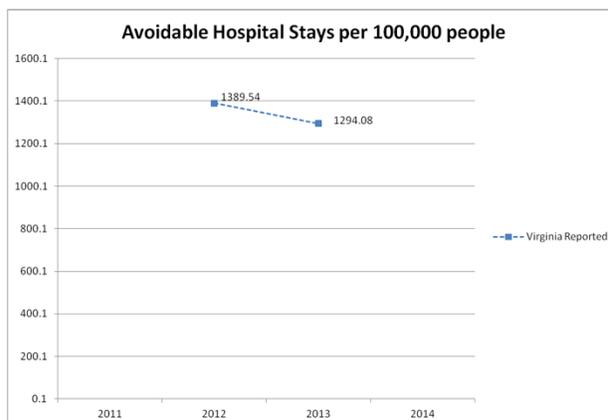
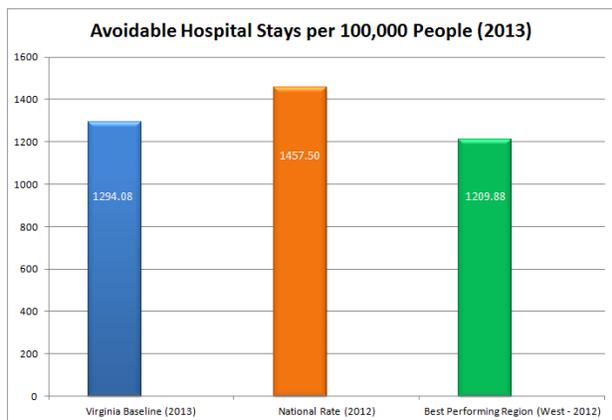


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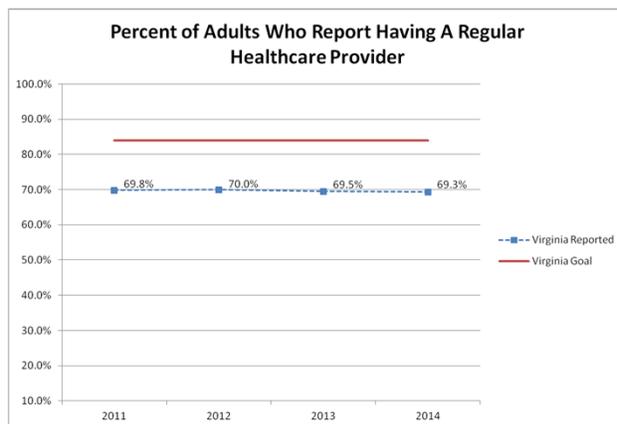
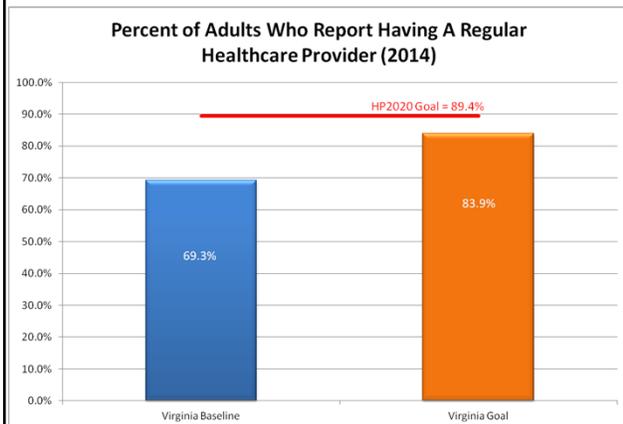
Quality Healthcare

Short Horizon Metrics	→	Long Horizon Metrics
Avoidable Hospitalization Rate		Metric related to accessibility of appropriate care when needed
Percent of Adults Who Report Having a Regular Healthcare Provider <i>Source: BRFSS Self Report</i>		Percent of people in an integrated health home (medical, behavioral, dental)
Percent of Hospitals Meeting Virginia's Goal for Prevention of Hospital-onset <i>Clostridium difficile</i> Infections		Evolving healthcare safety metric

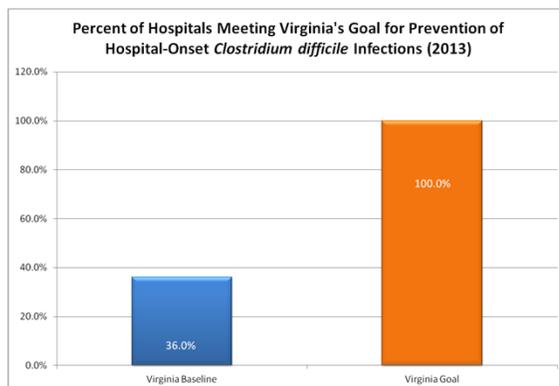
Avoidable Hospital Stays per 100,000 People



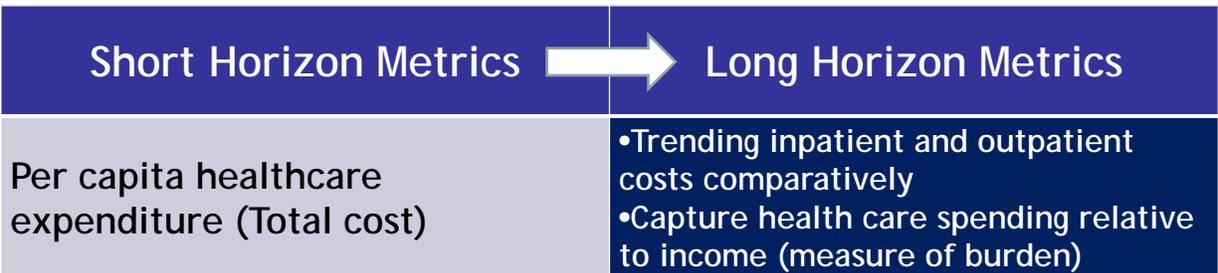
Percent of Adults Having a Regular Healthcare Provider



Percent of Hospitals Meeting Virginia's Goal for Prevention of Hospital-Onset *Clostridium difficile* Infections (No Trend Data)

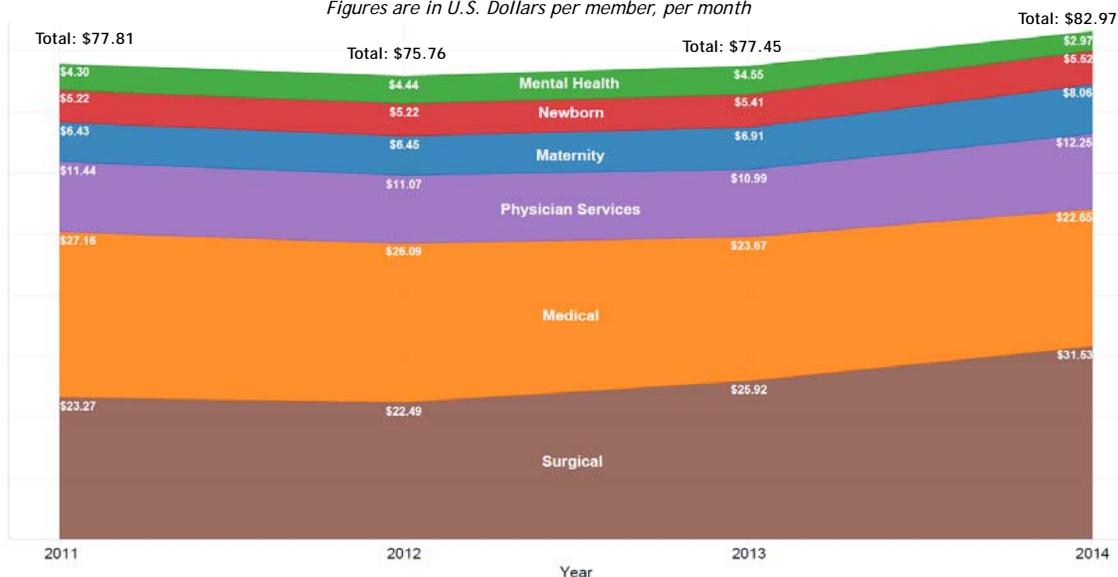


Quality Healthcare



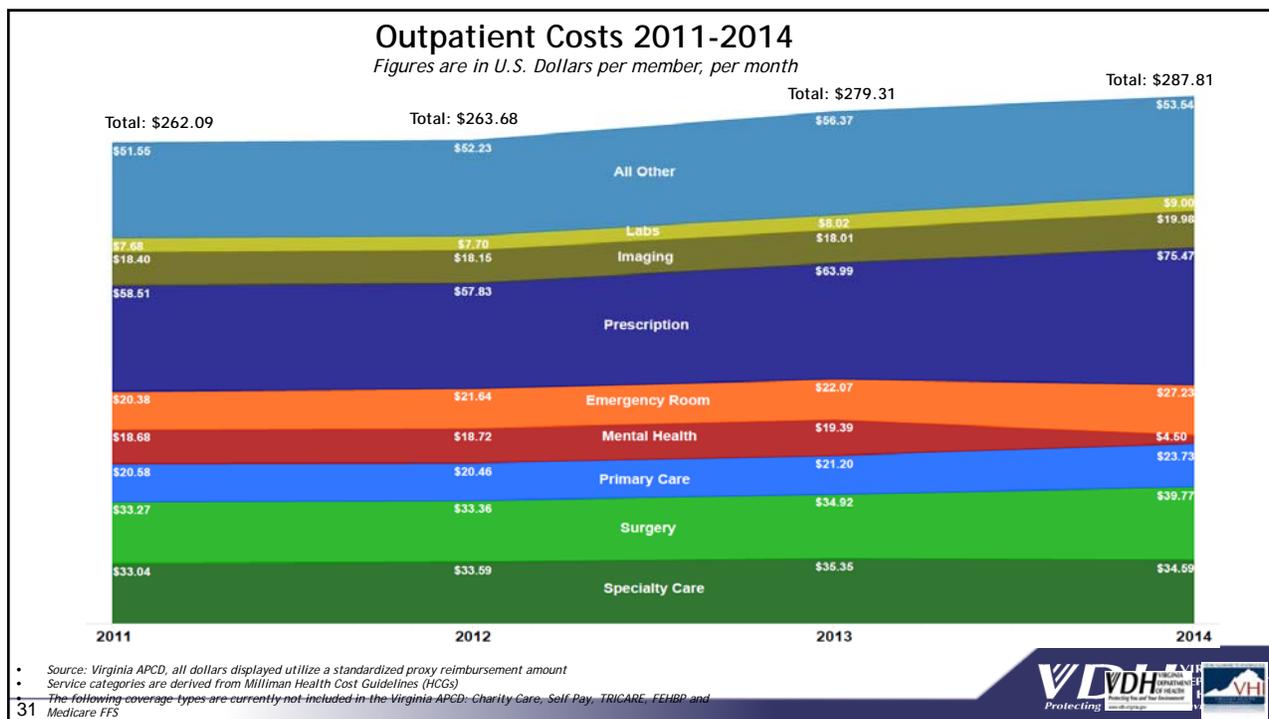
Inpatient Costs 2011-2014

Figures are in U.S. Dollars per member, per month

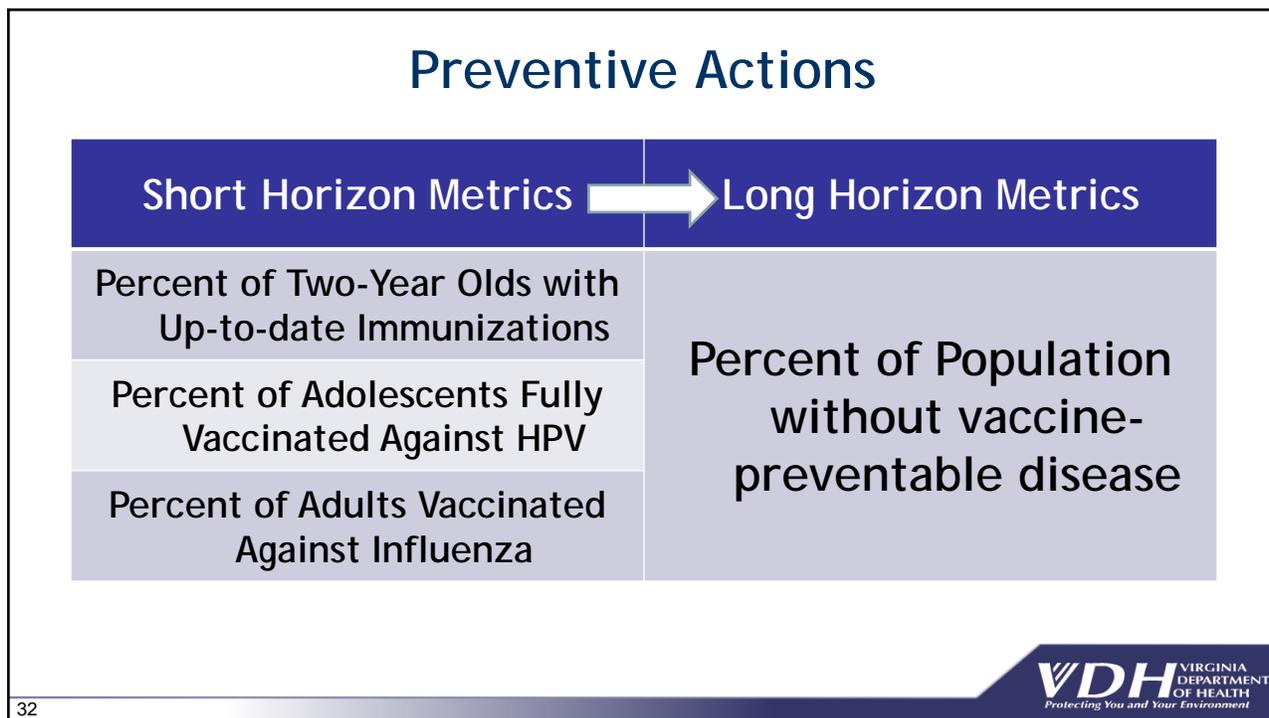


- Source: Virginia APCD, all dollars displayed utilize a standardized proxy reimbursement amount
- Service categories are derived from Milliman Health Cost Guidelines (HCGs)
- The following coverage types are currently not included in the Virginia APCD: Charity Care, Self Pay, TRICARE, FEHBP and Medicare FFS

30 State Medicaid data is only included through June of 2014



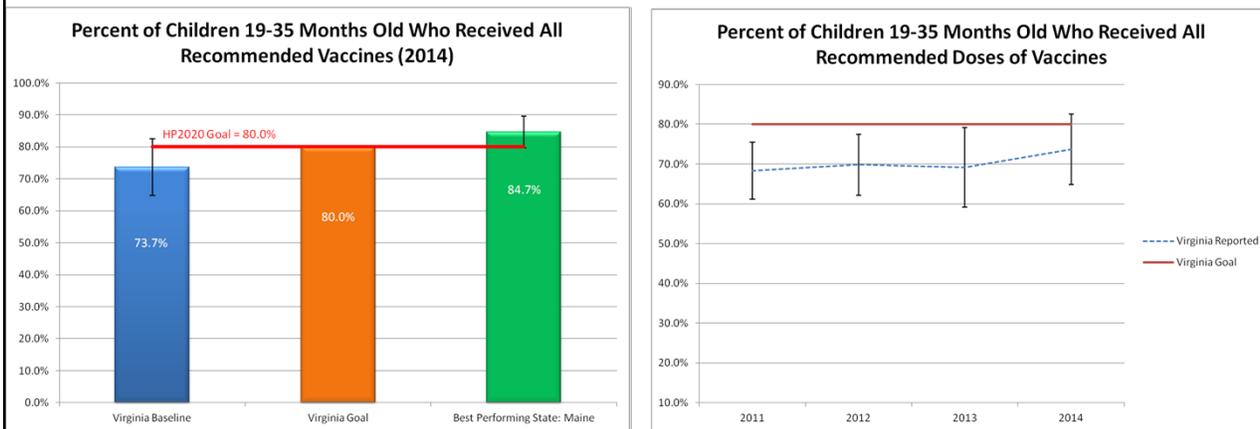
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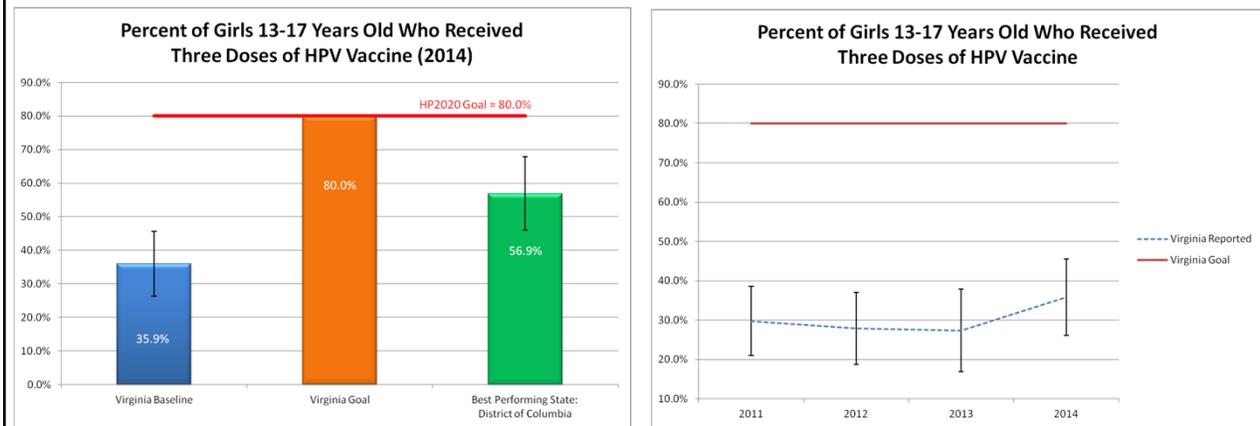


Percent of Children Who Received All Recommended Vaccines



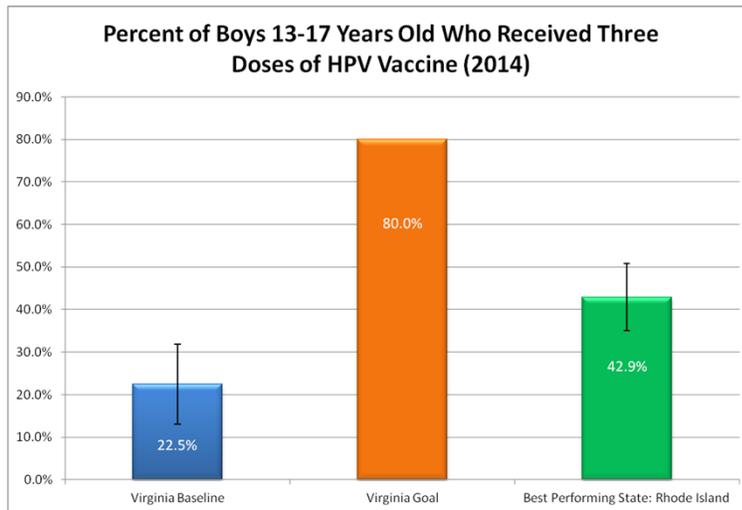
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Percent of Girls 13-17 Years Old Who Received Three Doses of HPV Vaccine



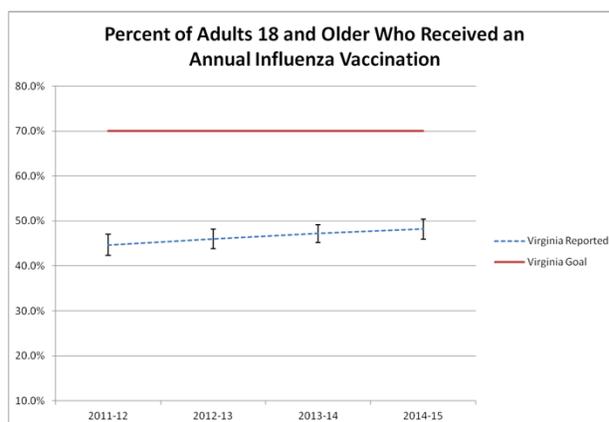
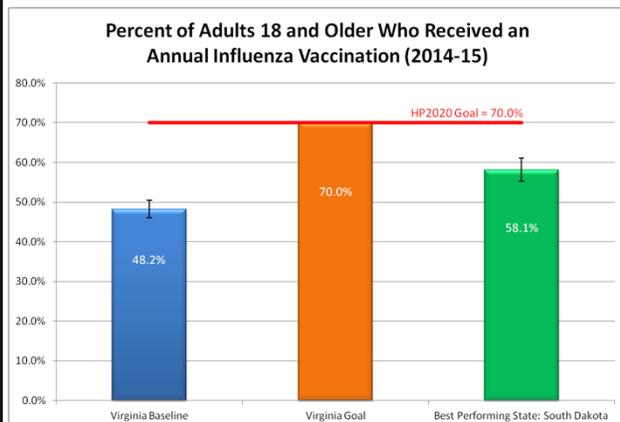
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Percent of Boys 13-17 Years Old Who Received Three Doses of HPV Vaccine (No Trend Data)



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Percent of Adults Who Received an Annual Influenza Vaccination



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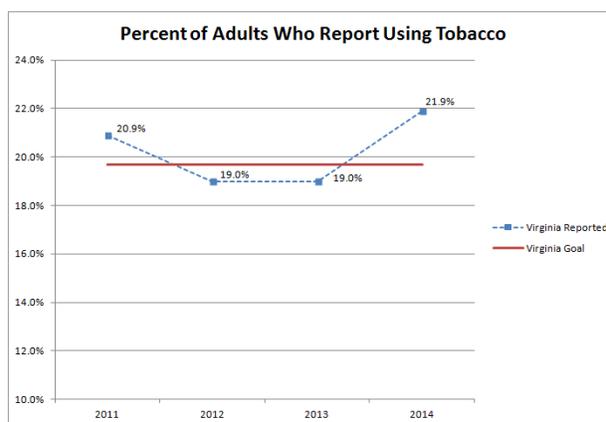
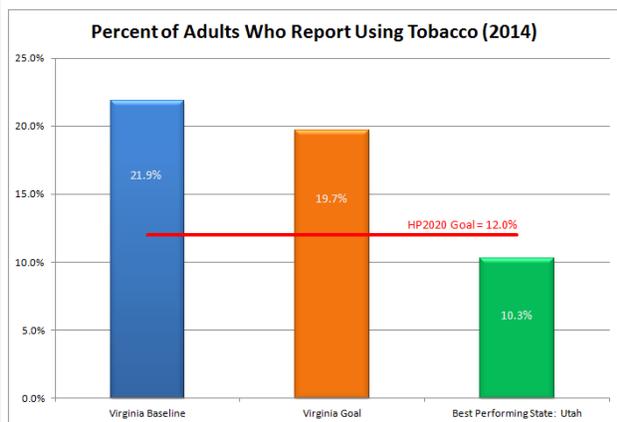
Preventive Actions

Short Horizon Metrics	→	Long Horizon Metrics
Percent of Adults Who Use Tobacco <i>Source: BRFSS Self Report</i>		Percent of Population Free of Lung Cancer/Tobacco related illness
Percent of Adults Screened for Colorectal Cancer <i>Source: BRFSS Self Report</i>		Percent of Population Free of Colorectal Cancer
Percent of Females Screened for Breast Cancer <i>Source: BRFSS Self Report</i>		Percent of Population Free of Breast Cancer

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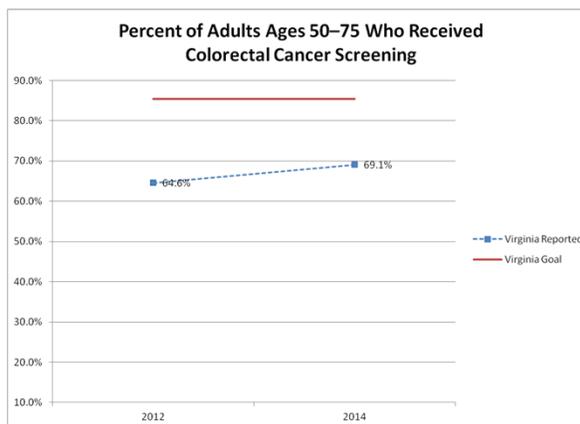
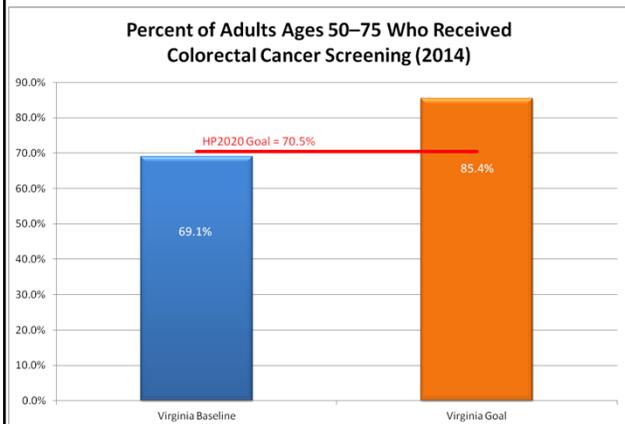
Percent of Adults Who Report Using Tobacco



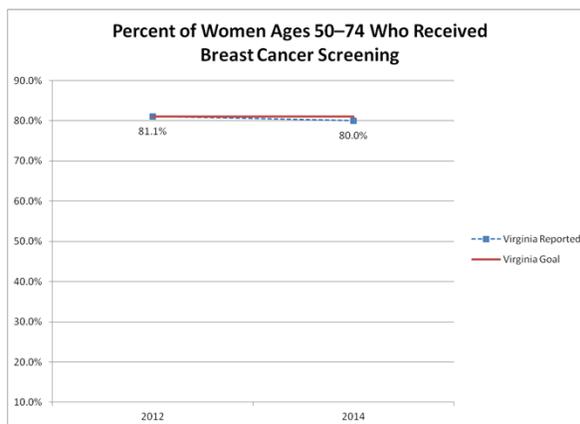
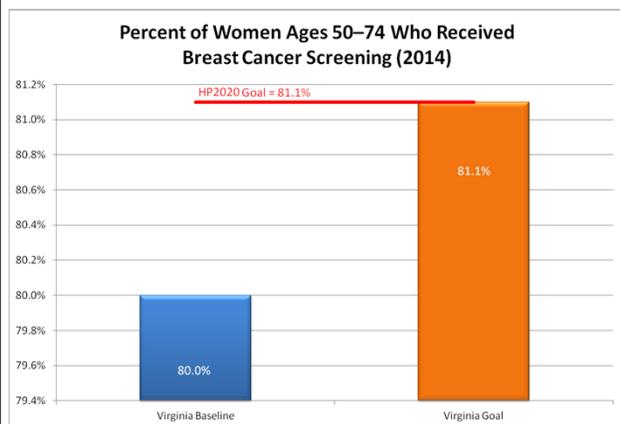
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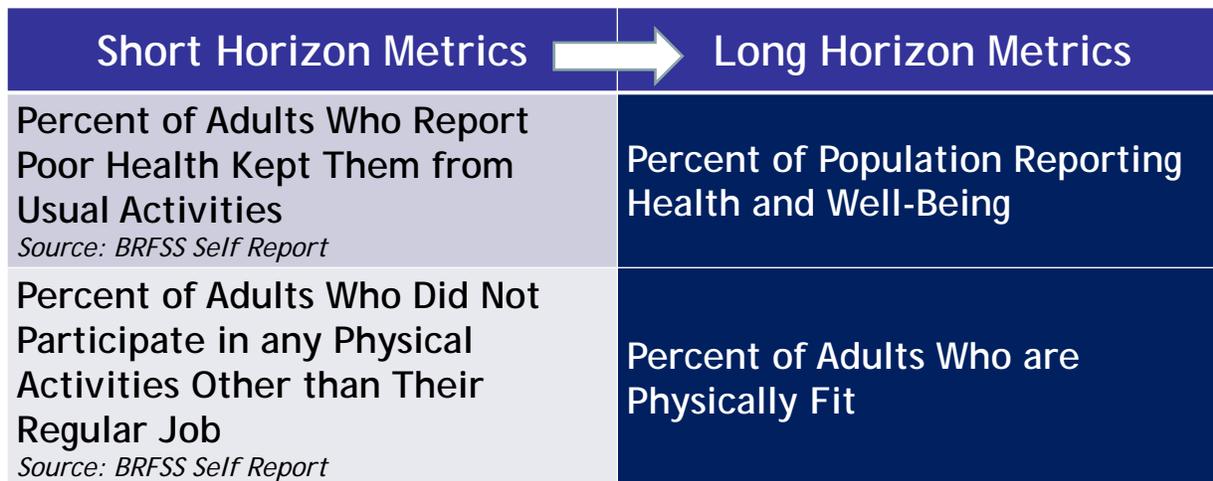
Percent of Adults Who Received Colorectal Cancer Screening in Accordance with Current Guidelines



Percent of Women Who Received Breast Cancer Screening in the Past Two Years

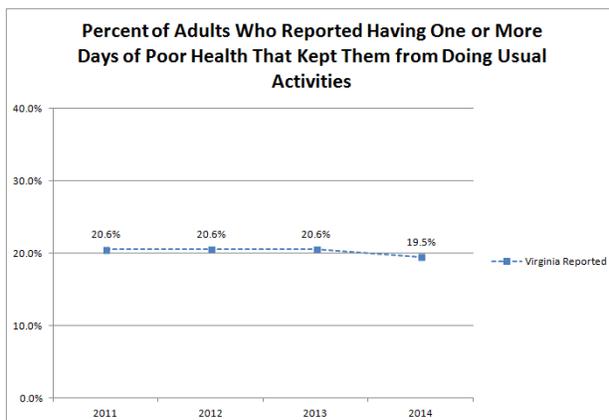
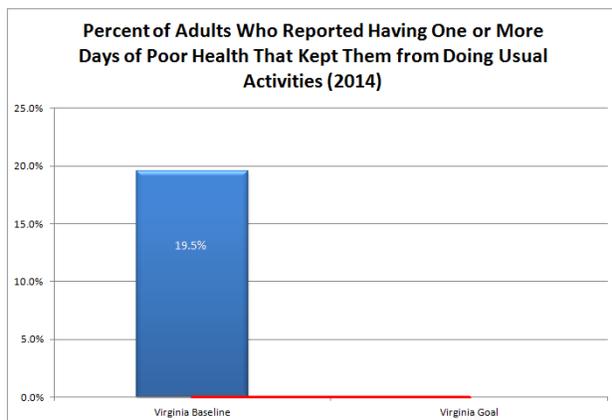


Well Being



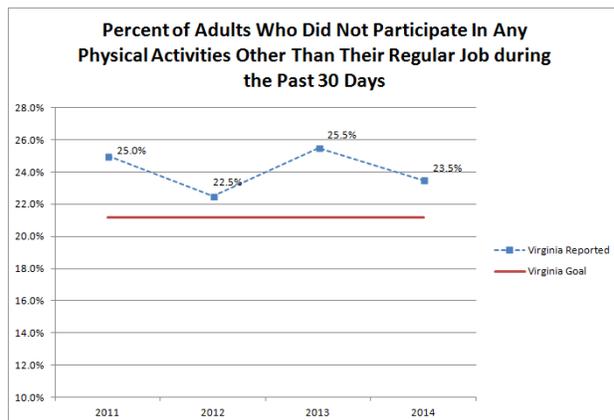
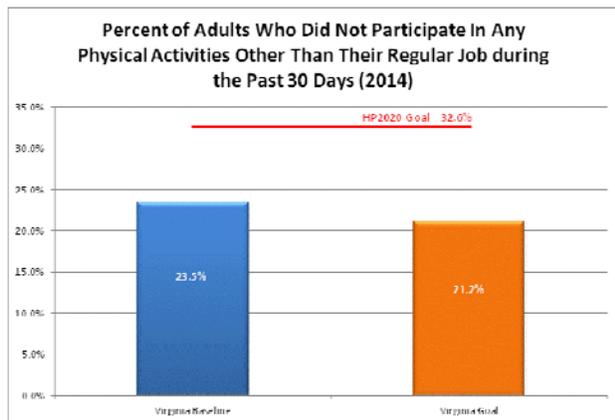
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Adults Who Reported Poor Health Kept Them From Usual Activities



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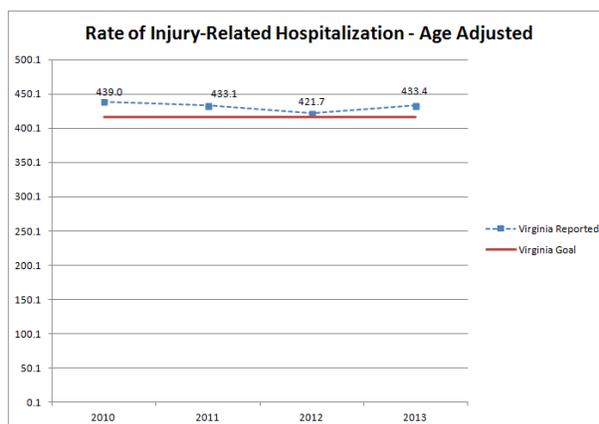
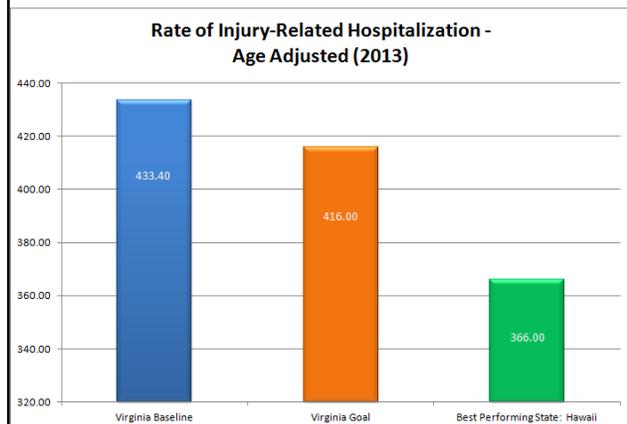
Adults Who Did Not Participate in Physical Activity



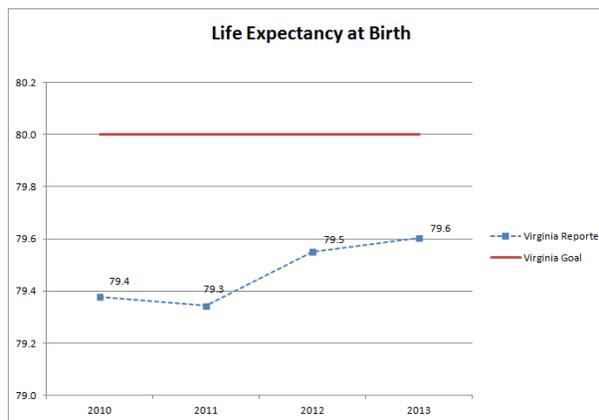
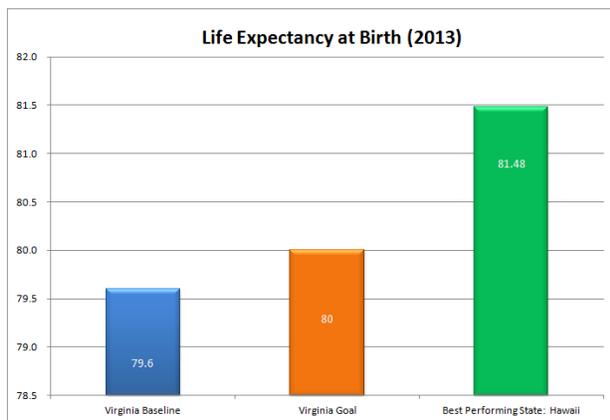
Well Being

Short Horizon Metrics	Long Horizon Metrics
Rate of Injury Hospitalization by Age Group	
Life Expectancy at Birth	Disability Adjusted Life Years (DALYs); Measure Of Functional Well-Being in Older Adults
Rate of Mental Health and Substance Use Disorder Hospitalization in Adults	Percent of Population reporting no behavioral health/substance use issues impacting daily functioning

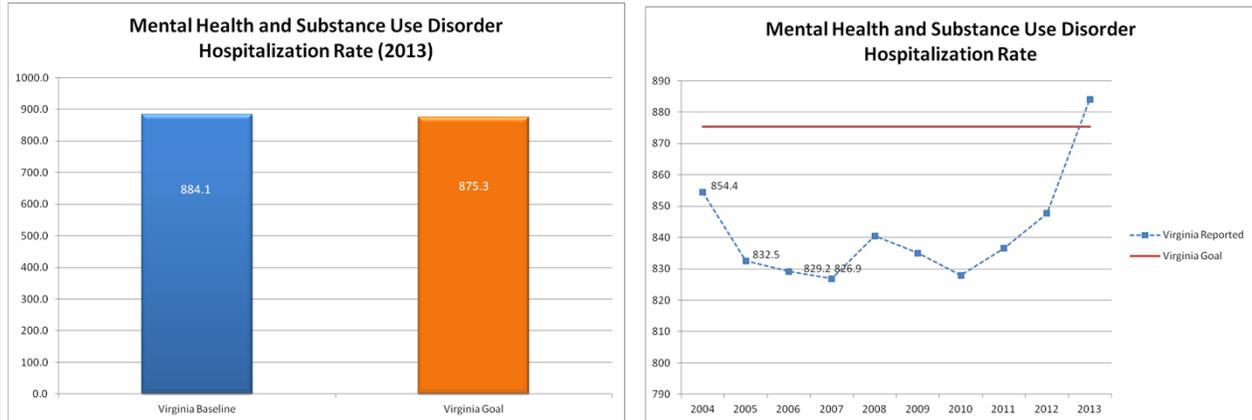
Injury Related Hospitalizations



Life Expectancy at Birth



Mental Health and Substance Use Disorder Hospitalization Rate



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METRICS ALONE ARE INSUFFICIENT

- We also require:
 - Vision - Where we want to be
 - Process - How to get there
 - Accountability - Who does what and by when
 - Will - A commitment to move forward
- Much of the above will be addressed as we collectively create Virginia's *Plan for Well-Being*

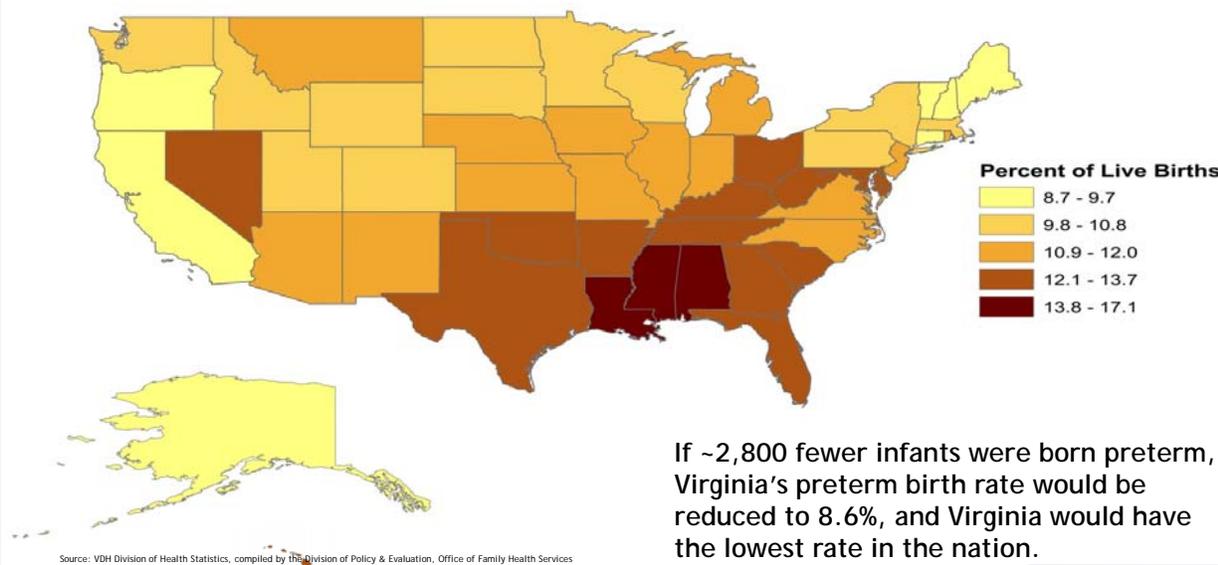
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Framework for Well-Being in Virginia



EFFECTS OF TOBACCO ON PREGNANCY OUTCOMES

Preterm (<37 completed wks) Birth Across the Nation, 2012



Source: VDH Division of Health Statistics, compiled by the Division of Policy & Evaluation, Office of Family Health Services



Virginia's Goal: The best term rate in the nation

Improving pre-conception health could take Virginia more than two thirds (82.0%) of the way to our goal of having the best term rates in the country, with 2,295 more infants born at full-term.

If Risk Factor Were Eliminated Among Pregnant Women	Additional Infants that Could be Born Full-term
Smoking	1,548
Diabetes	275
Chronic hypertension	190
Risks from prior preterm birth	179
Anemia	103

Source: VDH Division of Health Statistics, compiled by the Division of Policy & Evaluation, Office of Family Health Services



Trajectories of Health and Child Development, and MCH Checkpoints

DOMAINS OF HEALTHY CHILD AND FAMILY DEVELOPMENT:

- Environmental** – Poverty
 - Employment
 - Safety
 - Stress
 - Toxins
- Social** – Communication
 - Education
 - Social Support
 - Mobility
- Behavioral** – Mental Health
 - Tobacco/EtOH/drugs
 - Diet/Fitness
- Genetic** – Familial Factors
 - Geo-Ethnic ff
 - Personal
- Medical** – Chronic Disease
 - Infections
 - Disabilities

PROTECTIVE FACTORS: [RAISE TRAJECTORY]

- Born Wanted and Well
- Skilled Parents
- Healthy Home
- Early Reading
- Full Preventive Care
- Safe Play Space
- Good Schools
- Social Capital
- Mentors
- Physical Activity

RISK FACTORS: [DEPRESS TRAJECTORY]

- Poverty
- Premature Birth
- Isolated Parent
- Lead Poisoning
- Poor Nutrition
- Violence
- Obesity
- Unaddressed illness
- Depression/isolation
- School Failure
- Tobacco/EtOH
- Unintended Pregnancy

MCH Checkpoints: OB ↑↑↑↑↑ Pediatric ↑

MCH Checkpoints are regular and prn times of contact between parents/children and health professionals:

In a community system of family-centered medical homes, these MCH Checkpoints are organized into a coherent, connected, longitudinal system. That Family Health system recognizes and address risks and protective factors that will influence childrens' healthy development, as it responds to acute needs, and offers prevention opportunities for all generations.

Trajectories and MCH Checkpoints Wm Hollinshead - Sept 2007

Discussion/Questions