

October 30, 2014

QUALITY ASSURANCE AND EVALUATION OF THE AFFORDABLE CARE ACT IN KING COUNTY, WASHINGTON

2013-2014 FINAL REPORT



A Joint Project of Public Health – Seattle & King County &
University of Washington Department of Health Services



SCHOOL OF PUBLIC HEALTH
UNIVERSITY *of* WASHINGTON

Public Health
Seattle & King County



In 2013, Public Health – Seattle & King County (PHSKC) and the University of Washington Department of Health Services partnered to design a framework, based on national and local guidance, as well as key local priorities, to monitor the implementation and impact of the Affordable Care Act (ACA) in King County, Washington. The **ACA Quality Assurance & Evaluation Framework** links fundamental goals of the ACA, key topic areas and indicators, an equity lens, and secondary and primary data sources. Year 1 (2013) of the project included laying the groundwork for this framework, conducting an analysis of baseline data, identification of key research questions, finalizing data collection protocols, and development of data analysis techniques. This project offers PHSKC a framework to begin answering key quality assurance (QA) and research evaluation questions around implementation of the ACA in the region.



The ACA Quality Assurance & Evaluation Framework is grounded in 7 topic areas:

1. **Access to care** represents the coverage, affordability, and availability of health care, corresponding with the ACA's chief goal of expanding access to affordable health insurance.
2. **Utilization of care** represents the change in use of health care expected due to greater health insurance coverage and mandated essential health benefits.
3. **Quality of care** represents improvements in evidence-based practices that lead to improved health outcomes and/or lower cost of care.
4. **Patient Experience** represents consumers' satisfaction with health care they receive.
5. **Health system capacity** represents the ability of plans, plan networks, and providers to adequately and equitably meet demands for health care.
6. **Costs** represent the total per capita costs of health care and health plan premiums.
7. **Population health** represents coverage of preventive services and population-level self-reported health status.

This report will present baseline data (prior to ACA implementation) for these topic areas.

A key driver of PHSKC's approach to QA and evaluation is to understand the equity impacts of health reform. This includes assessing the impact of the ACA on health disparities by place, race, and socioeconomic status. For example, a substantially higher concentration of the newly Medicaid eligible population live in the southwestern area of King County, whereas it is unclear whether this area will have sufficient health system capacity to meet increases in demand for health care services.

Baseline community health data show that the social determinants of health, including neighborhood, race/ethnicity, education, and employment, all play a consistent and large role in shaping individual health care and health outcomes. Stemming from its assessment and QA role, PHSKC aims to monitor to what degree these disparities will be addressed through federal, state, and local health reforms.

In the years ahead, PHSKC plans to evaluate the longer-term impacts of the ACA, including the quality of health care services provided within its jurisdiction. This includes working across agencies, facilitating and convening stakeholders, breaking down traditional cross sector barriers in a commitment to public accountability and shared knowledge, and measuring progress towards eliminating health disparities and the triple aim of improved health, quality of care, and reduced costs.



This report was prepared by **Eli Kern** (Epidemiologist, PHSKC), **Dr. Doug Conrad** (Professor, University of Washington School of Public Health, Department of Health Services), and **Jeremy Snider** (Doctoral Student, UW SPH, Department of Health Services).

The authors would like to thank David Fleming, Amy Laurent, Marguerite Ro, Keith Seinfeld, and David Solet of PHSKC, and Ian Randall and Megan Shepherd-Banigan of UW SPH Department of Health Services for their substantial contributions to this project and careful review of this report.

For additional health reform-related information or questions about this report, **please contact:**

Eli Kern MPH RN | Epidemiologist
Assessment, Policy Development and Evaluation
Public Health - Seattle and King County
Phone: 206.263.8727 | Email: eli.kern@kingcounty.gov

- [Executive summary](#) - 2
- [Acknowledgements](#) - 4
- [Glossary of terms](#) - 6
- [How to use this report](#) - 7
- [Background](#) - 8
- [Methods](#) - 18
- [Findings](#) - 31
- [Conclusion and next steps](#) - 77
- [References](#) - 79
- [Appendices](#) - 80

ACA – Affordable Care Act

ACS – American Community Survey

AHRQ – Agency for Healthcare Research and Quality

AIAN – American Indian/Alaska Native

APCD – All-Payer Claims Database

APDE – Assessment, Policy Development & Evaluation

BAC – Before-after-comparison

BRFSS – Behavioral Risk Factor Surveillance System

CAHPS – Consumer Assessment of Healthcare Providers and Systems

CHARS – Comprehensive Hospital Abstract Reporting System

CHPW – Community Health Plan of Washington

COPD – Chronic obstructive pulmonary disease

DBHR – Division of Behavioral Health and Recovery

DCHS – Department of Community and Human Services

DM – Diabetes mellitus

DSA – Data sharing agreement

DSHS – Department of Social and Health Services

ED – Emergency department

EHR – Electronic health record

FFS – Fee-For-Service

FOBT – Fecal Occult Blood Test

FPL – Federal Poverty Level

FQHC – Federally Qualified Health Center

HBE – Health Benefit Exchange

HCA – Health Care Authority

HCP – Health care provider

HEDIS – Healthcare Effectiveness Data and Information Set

HIPAA – Health Insurance Portability and Accountability Act

HP2020 – Healthy People 2020

HRA – Health Reporting Area

ICHS – International Community Health Services

IHI – Institute for Healthcare Improvement

IOM – Institute of Medicine

KCHHC – King County Hospitals for a Healthier Community

LE – Lower extremity

LHD – Local health department

LHI – Leading Health Indicator

MCO – Managed Care Organization

MH – Mental health

MHCADSD – Mental Health, Chemical Abuse and Dependency Services Division

MSS – Mystery shopper survey

NCQA – National Committee for Quality Assurance

NHPI – Native Hawaiian/Pacific Islander

NPI – National Provider Identifier

OIC – Office of the Insurance Commissioner

PCP – Primary care provider

PHSKC – Public Health – Seattle & King County

PQI – Prevention Quality Indicator

QA – Quality assurance

QHP – Qualified Health Plan

SES – Socioeconomic status

SUD – Substance use disorder

TARGET – Treatment and Assessment Report Generation Tool

USPSTF – United States Preventive Services Task Force

UW SPH – University of Washington School of Public Health

WHA – Washington Health Alliance

WSIIS – Washington State Immunization Information System

WSMA – Washington State Medical Association

Guide to the figures

The bulk of the report's content is in the [Baseline findings](#) section, which contains the data and figures. The report uses **three types of figures**:

1. Figures that show data only for King County, which will be colored light blue (●).
2. Figures that show data for before and after Medicaid expanded on January 1, 2014. Before = light blue (●) and after = dark blue (●).
3. Figures that show data for subgroups compared to the King County average. King County average = yellow (●), worse than the county = red (●), same as the county = gray (●), and better than the county = dark blue (●).

Additional colors are used rarely and only when a figure does not match one of these schemes (e.g. maps).

To promote responsible dissemination and interpretation of findings, data have been subjected to data presentation guidelines developed by the Assessment, Policy Development & Evaluation (APDE) unit of PHSKC. An **asterisk (*)** indicates that data have been suppressed because there are too few cases to protect confidentiality and/or report reliable rates. An **exclamation point (!)** indicates that an indicator has too few cases to meet the precision standard, and should be interpreted with caution.

In most figures, the reader will observe an error bar for each estimate. This error bar represents the **confidence interval**, which is the range of values that includes the true value 95% of the time. If the confidence intervals of two groups do not overlap, the difference between groups is considered statistically significant (meaning that chance or random variation is

unlikely to explain the difference).

Terms for demographic subgroups (e.g. race/ethnicity) are consistent with those used by [Communities Count](#), which are defined through a careful consumer engagement process.

Multiple-year averages are typically used in the report to improve the reliability of the estimates for subgroups.

Additional technical information can be found in [Appendix 1](#).

About this report

This report was developed in landscape orientation in Microsoft PowerPoint to facilitate rapid dissemination and reuse of data and figures. As such, a modular approach has been used to organize content (i.e. one figure per page) to allow users to extract specific pages or figures for their own use.

Font and character spacing were selected to be consistent with guidelines on improving the readability of text on electronic devices. Lato (a Google font) is used for the body of the report, and Arial for figures.

The color scheme was selected to align with newly developed communications standards for PHSKC.

Reuse of report content

Readers should feel free to reuse any content from this report, but please attribute borrowed content to Assessment, Policy Development & Evaluation, Public Health – Seattle & King County.

Why we need QA and evaluation of the Affordable Care Act

A new era in health care

The ACA aims to drastically alter the structure of the U.S. health care system and ensure greater equity and efficiency in how health services are delivered. Thus, there is a high degree of interest in investigating how the ACA might affect equitable access to care, quality and patient experience, and the costs of health coverage and care. Additionally, there are concerns about whether the health system is prepared for specific provisions in the ACA – for example, the capacity of the health workforce to serve an influx of new patients seeking care, and whether new care coordination strategies within the ACA are effective in improving access, quality, and affordability of health care.

Targeting health disparities

In addition to requiring information about the health of the overall King County population, local government leaders, policymakers and practitioners need to understand how the ACA will impact health disparities in order to prioritize needs, form policy changes and interventions, and monitor progress. In King County, average measures of quality of life, social, and health factors are among the highest in the country. However, these averages mask stark differences by place, race and income. People of color, people living in poverty, and people living in communities with low opportunities experience the health impacts of inequity. One glaring example of such disparity is life expectancy – people living in communities of King County with the lowest health and social well-being live on average 13 years less than residents in the healthiest neighborhoods. Consistent with the [King County Equity and Social Justice Initiative](#), there is a local consensus that in order for the ACA to be successful, it will have to lead to a narrowing of health disparities in addition to overall improvements in health outcomes.

The changing role of local health departments

Nationwide, public health leaders have [concluded](#) that the role of local health departments (LHDs) must evolve in the context of health reform. The future role of LHDs will be a mixture of traditional services and new, including a need to expand QA and assessment functions in an era of health care transformation, improve public accountability by identifying and gaining access to new “big data” sources to leverage for public health surveillance, and increase focus on working across sectors, including non-health sectors, to address the upstream, social determinants of health. In summary, the LHD of the future must leverage cross sector data to assess local burden of disease and disparities, strategize and act across sectors and systems, and rigorously evaluate progress towards the triple aim to build an evidence base and ensure maximal promotion of health and well-being.

QA and evaluation

Much of the responsibility for QA and evaluation of health services and population health is delegated to local and state jurisdictions, where authorities can be most responsive to community needs. This role traditionally falls to the LHD, which acts as the primary provider of community wide health information. Stemming from this role, PHSKC aimed to develop a comprehensive QA and evaluation approach to guide internal and external decision-makers and practitioners into the post-ACA era. Through partnership with the University of Washington, PHSKC's APDE unit has developed a grounded, focused ACA QA and Evaluation Framework (hereinafter referred to as "the **Framework**") that will make use of routine, high-quality data to answer key practice and policy questions about ACA implementation and impact in King County.

The King County Framework

The Framework relies on rigorous, nationally recognized evaluation frameworks, but is also tailored to local context, priorities, and attainable data. It is rooted in an equity lens to ensure that both the intended and unintended consequences of the ACA are recognized, understood, and addressed for both the overall population and subgroups with a disproportionate burden of ill health.

The Framework aims to minimize additional data-gathering requirements, and to reduce burden on data suppliers; data sources have been selected to complement ongoing efforts in the state and county. Data sources were also chosen based on the periodicity and lag time of available data, to produce actionable information in a timely manner. Data will be displayed with the intent to represent the community-level effects of the ACA in King County, and its effect on health care and health outcomes.

The major benefit of designing and constructing the Framework early on during ACA implementation is to offer a mechanism with which to anticipate the wide-ranging potential impacts of the ACA and to estimate those impacts with actual data that is actionable, relevant, and timely for administrators, policymakers, and practitioners in the King County region and Washington state. It is our intent to provide a unique analytic tool that will support improved real-time implementation of the ACA in our region and the state, as well as rigorous ongoing evaluation.

A shared learning experience

As we work to create a robust evaluation framework, we are seeking and encouraging collaboration with stakeholders for efficient collection of relevant data, and to discuss how data can be best analyzed, shared, and used in the community. A commitment to public accountability, data transparency, and a shared knowledge of the community-level effects of the ACA in King County, will benefit all in the region, and offer lessons that can be shared across the country. The following document aims to outline the rationale, basis, and implementation of the Framework in the coming years.

Lessons learned from prior health reform

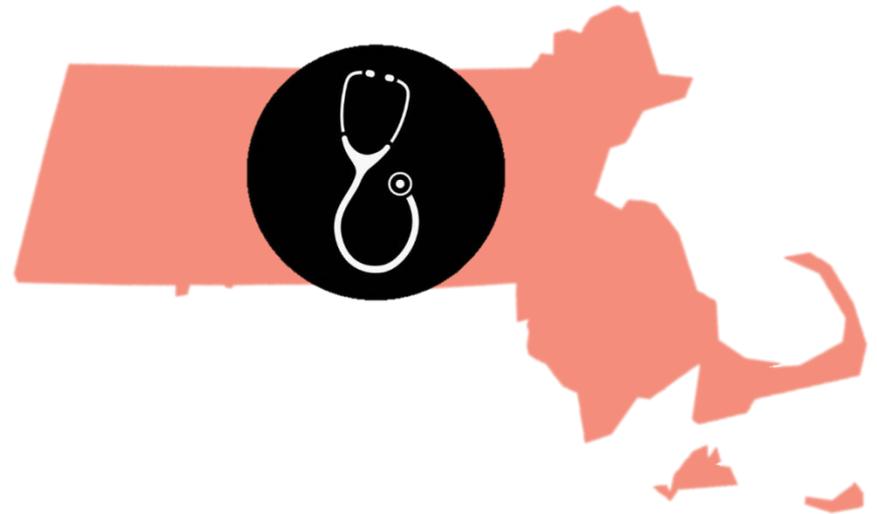
Massachusetts

In 2006, Massachusetts enacted legislation to provide nearly universal health care coverage. The legislation combined Medicaid expansion with subsidies to help low- and moderate-income residents purchase insurance, an employer responsibility requirement, and an individual mandate.

Early [findings](#) from Massachusetts suggested that even with overall improvements in health insurance coverage, disparities persisted with adults who were uninsured in the Fall of 2007. The uninsured were more likely to be under age 35, male, non-white or Hispanic, and single. They were also more likely to be noncitizens and to have low levels of educational attainment. [Additionally](#), one year after Medicaid expansion, the percentage of internal medicine physicians accepting Medicaid patients fell from 73 to 59 percent and has not returned to pre-expansion levels over the past 7 years.

More recent [data](#) indicates that Massachusetts maintained near-universal coverage through 2010, with access to health care in 2010 better than pre-reform levels noted in 2006 (e.g. percent of adults with a preventive care visit rose by 6 percentage points) and, a decline in emergency department use (decrease of 4 percentage points between 2006-2010). Recent evaluations have also shown that health reform brought cost savings, including a [reduction](#) in spending on uncompensated care. Finally, population health improvements were also [tied](#) to health reform, including statistically significant increases in colonoscopy screening, influenza vaccination, and attempts to quit smoking. However, gaps in access to care and weaknesses in provider capacity remained a [concern](#), leading to the important conclusion that insurance coverage does not guarantee access to care.

As King County and Washington state enter the post-ACA era, one immediately relevant lesson learned from the Massachusetts experience is that health reform is a long-term commitment. The impact of the ACA in King County will stretch well beyond the terms of our current elected officials and the current and near future budget cycles of any agency. In an environment where quick results are the norm, this long-term perspective will be important to keep in mind when making policy and budget decisions, and when evaluating the impact of the ACA.



The Oregon Health Experiment

In 2008, due to budget constraints, Oregon randomly selected 10,000 new enrollees, from a pool of 90,000 applicants, to be added to the state's existing Medicaid [program](#). This randomized experiment presented a rare opportunity to assess the impact of public health insurance coverage on health care and health outcomes among able-bodied uninsured, low-income adults ($\leq 100\%$ FPL) who had expressed interest in insurance coverage.

The study used administrative data from hospital discharge, credit report, and mortality records, as well as a mail survey sponsored by the Oregon Health Study Group, which implemented the evaluation. The research team found that after one year in the study, those selected for Medicaid coverage had significantly higher health care utilization, lower out-of-pocket medical expenditures and medical debt, and better self-reported health than those applicants not enrolled in Medicaid.

However, two years after implementation of the experiment, an [evaluation](#) found no significant effect of Medicaid coverage on measured physical health, on the prevalence or diagnosis of hypertension or high cholesterol levels, or on the use of medication for these conditions. Significant changes were noted in diabetes detection, but not in proper management of diabetes via hemoglobin A1c levels. This evaluation reaffirmed higher utilization of health care services, reduced financial strain, and lower rates of depression among the covered population.

Both of these prior experiences with health reform support the need for development of process measures that describe how health care services are utilized in communities, as well as the need to identify and monitor potential barriers to accessing care. Additionally, these experiences

underline the importance of identifying outcome measures that are sensitive to both short and long term effects of health reform implementation.



Description of the ACA Quality Assurance and Evaluation Framework

Overview

Major topic areas were identified as areas sensitive to changes implemented through the ACA, and that relate most closely to the QA and evaluation role of PHSKC.

Two overarching goals of the ACA are to expand coverage of beneficial health services at the population level and improve the quality and cost-effectiveness of health services, with a particular focus on primary care. Major strategies for this include improving affordability and access to health insurance (through the creation of state-based insurance exchanges), improving the quality of services that health plans are required to offer by mandating essential benefits, and augmenting means-tested public programs (Medicaid, Children's Health Insurance Program).

Based on an extensive literature review, as well as a review of existing national and local guidance documents, the following **seven topic areas** were identified:

1. **Access to care** represents the coverage, affordability, and availability of health care, corresponding with the ACA's chief goal of expanding access to affordable health insurance.
2. **Utilization of care** represents the change in use of health care expected due to greater health insurance coverage and mandated essential health benefits.
3. **Quality of care** represents improvements in evidence-based practices that lead to improved health outcomes and/or lower cost of care.

4. **Patient Experience** represents consumers' satisfaction with health care they receive.
5. **Health system capacity** represents the ability of plans, plan networks, and providers to adequately and equitably meet demands for health care.
6. **Costs** represent the total per capita costs of health care and health plan premiums.
7. **Population health** represents coverage of preventive services and population-level self-reported health status.



The Framework in detail

Pages [14](#) and [15](#) display the conceptual basis and detailed structure of the Framework.

The seven topic areas of the framework are tied to fundamental goals of the ACA and viewed through an equity lens ([Page 14](#)).

The topic areas break down into indicator areas, which contain the actual indicators ([Page 15](#)).

The Framework is a rapidly evolving tool as new partnerships and new data sources are identified on a continual basis. As of the midpoint of 2014, availability of local data sources across the seven topic areas is highly variable, with limited data available for quality, patient experience, system capacity, and costs of health care. To address these gaps, PHSKC has been working to establish and strengthen cross sector, cross agency relationships and search for new primary and secondary data. For example, PHSKC focused attention on access to care through its mystery shopper surveys, has forged new relationships through working with the health insurance sector to ground truth and interpret access to care findings, and has been working with the Washington State Health Care Authority (HCA) to gain access to Medicaid claims data in order to assess changes in utilization, quality, and costs of care over time.

Grounded in national and local guidance

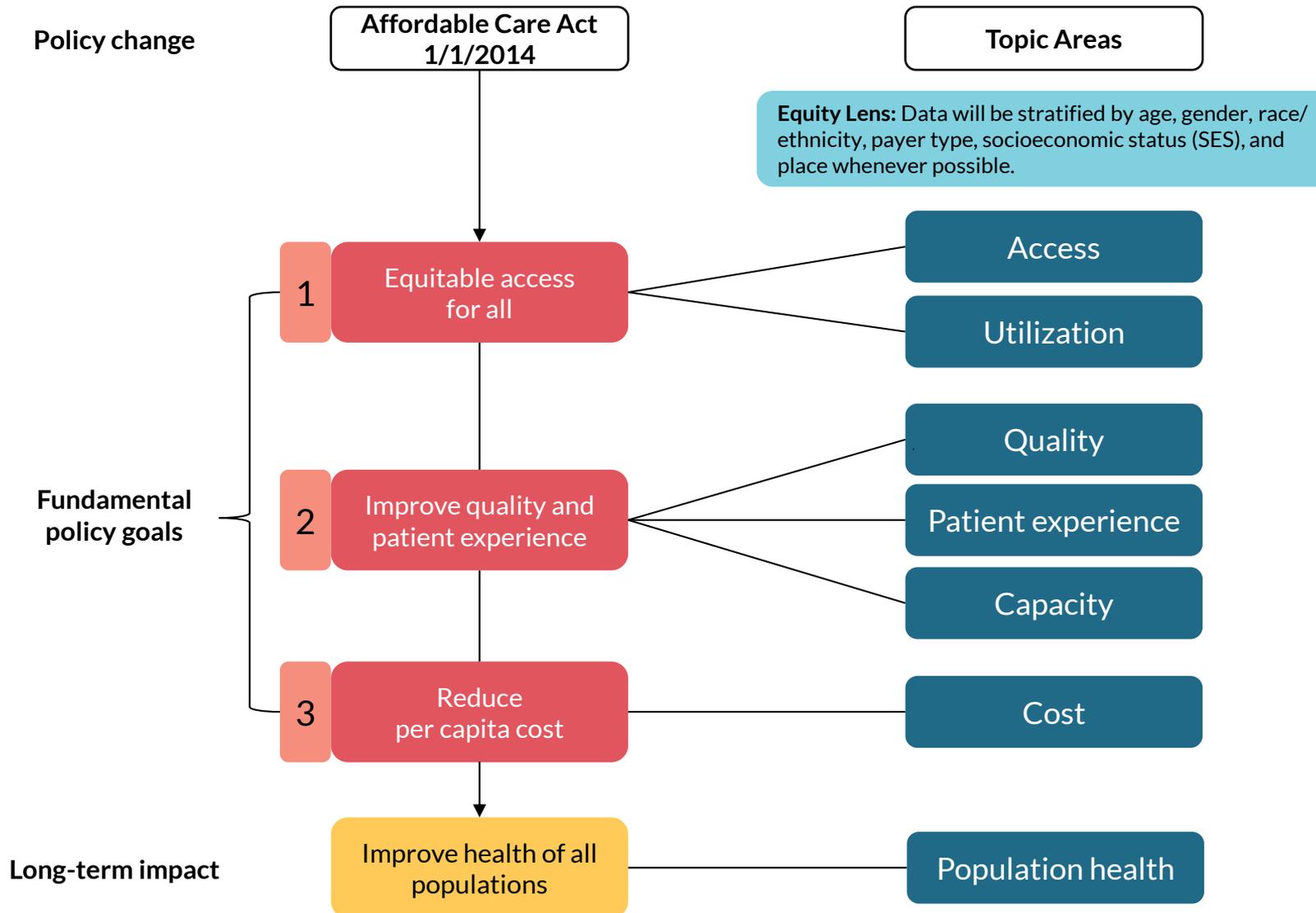
The Framework was purposefully developed to align closely with national efforts to define and evaluate health care and health outcomes. Each of the seven topic areas is grounded in national guidance documentation developed by Healthy People 2020 (HP2020), the Institute of Medicine

(IOM), the Agency for Healthcare Research and Quality (AHRQ), U.S. Preventive Services Task Force (USPSTF), and the Institute for Healthcare Improvement's (IHI) triple aim. For example, the first topic area, access to care, stems from the HP2020 and the ACA definitions of access to care, which include the elements of coverage, affordability and timeliness of care.

Also, to the extent possible, we attempted to incorporate specific indicators that have demonstrated utility, relevance and value for measuring health care. For example, many of the indicators contained in the Framework are derived from standard measures used nationally, including HP2020 Leading Health Indicators (LHIs), Healthcare Effectiveness Data and Information Set (HEDIS) measures (National Committee for Quality Assurance), Consumer Assessment of Healthcare Providers and Systems (CAHPS) indicators, or are being used or recommended by the IHI triple aim, AHRQ, the Washington Health Alliance (WHA), the Washington Office of the Insurance Commissioner (OIC), and PHSKC.

Our ability to measure all components of health care and health defined by national agencies is limited by the data available locally. Therefore, the Framework reflects these practical limitations and only proposes to capture information for which there is an identified data source. [Page 16](#) summarizes the use of national and local guidance to inform the Framework's seven topic areas. A document outlining the link between the guidance documentation and each indicator is included as [Appendix 2](#).

Conceptual framework for QA and evaluation of the Affordable Care Act



QA & Evaluation Framework to monitor ACA impact in King County

Topic area	Indicator areas	Illustrative indicators	Data sources	Data availability*
Access	<ul style="list-style-type: none"> Coverage Unmet need Affordability 	<ul style="list-style-type: none"> Uninsurance Not seeking care d/t cost Enrollment 	<ul style="list-style-type: none"> ACS BRFSS HBE CHARS 	Good
Utilization	<ul style="list-style-type: none"> Percent using any care 	<ul style="list-style-type: none"> Visits per capita Routine checkup past year Avoidable hospitalizations 	<ul style="list-style-type: none"> BRFSS CHARS DCHS ProviderOne 	Fair
Quality	<ul style="list-style-type: none"> Evidence-based practices Health outcomes 	<ul style="list-style-type: none"> Clinical Process Measures (e.g. Heart Failure Care) 	<ul style="list-style-type: none"> ProviderOne WHA Community Checkup 	Poor
Patient experience	<ul style="list-style-type: none"> Satisfaction with health care received 	<ul style="list-style-type: none"> Satisfaction with health care received 	<ul style="list-style-type: none"> BRFSS CAHPS 	Poor
Capacity	<ul style="list-style-type: none"> Plan network adequacy Health provider capacity 	<ul style="list-style-type: none"> Per capita supply of HCPs Accepting new patients 	<ul style="list-style-type: none"> OIC Safety net Mystery shopper 	Poor
Cost	<ul style="list-style-type: none"> Total costs of health care per capita 	<ul style="list-style-type: none"> Estimated price of inpatient (all) and total (Medicaid) care 	<ul style="list-style-type: none"> CHARS ProviderOne 	Poor
Population health	<ul style="list-style-type: none"> Preventive services Health status 	<ul style="list-style-type: none"> Late/no prenatal care Child immunization rate Fair/poor health status 	<ul style="list-style-type: none"> Vital stats WSIIS BRFSS 	Good

*Good data availability is defined here as routinely collected, low-cost/free data available on the King County level by sub-populations (i.e. equity lens).

ACS - American Community Survey; BRFSS - Behavioral Risk Factor Surveillance System; CAHPS - Consumer Assessment of Healthcare Providers and Systems; CHARS - Comprehensive Hospital Abstract Reporting System; DCHS - Department of Community and Human Services; HBE - Health Benefit Exchange; HCP - Health care provider; OIC - Office of the Insurance Commissioner; WHA - Washington Health Alliance; WSIIS - Washington State Immunization Information System.

A framework grounded in national and local guidance

Topic area	Indicator areas	National/local guidance
Access	<ul style="list-style-type: none"> Coverage Unmet need Affordability 	<ul style="list-style-type: none"> HP2020 LHIs ACA
Utilization	<ul style="list-style-type: none"> Percent using any care 	<ul style="list-style-type: none"> IHI triple aim (hospital/ED use) HP2020 NCQA (HEDIS) AHRQ PQIs
Quality	<ul style="list-style-type: none"> Evidence-based practices Health outcomes 	<ul style="list-style-type: none"> NCQA (HEDIS) Non-HEDIS measures (Community Checkup) IOM AHRQ
Patient experience	<ul style="list-style-type: none"> Satisfaction with health care received 	<ul style="list-style-type: none"> ACA IOM AHRQ (CAHPS) IHI triple aim
Capacity	<ul style="list-style-type: none"> Plan network adequacy Health provider capacity 	<ul style="list-style-type: none"> HP2020 OIC HCA
Cost	<ul style="list-style-type: none"> Total costs of health care per capita 	<ul style="list-style-type: none"> ACA IHI triple aim
Population health	<ul style="list-style-type: none"> Preventive services Health status 	<ul style="list-style-type: none"> HP2020 LHIs USPSTF NCQA (HEDIS) PHSKC

ACA - Affordable Care Act; AHRQ - Agency for Healthcare Research and Quality; CAHPS - Consumer Assessment of Healthcare Providers and Systems; HCA - Health Care Authority; HEDIS - Healthcare Effectiveness Data and Information Set; HP2020 LHIs - Healthy People 2020 Leading Health Indicators; IHI - Institute for Healthcare Improvement; IOM - Institute of Medicine; NCQA - National Committee for Quality Assurance; OIC - Office of the Insurance Commissioner; PQIs - Prevention Quality Indicators; USPSTF - U.S. Preventive Services Task Force.

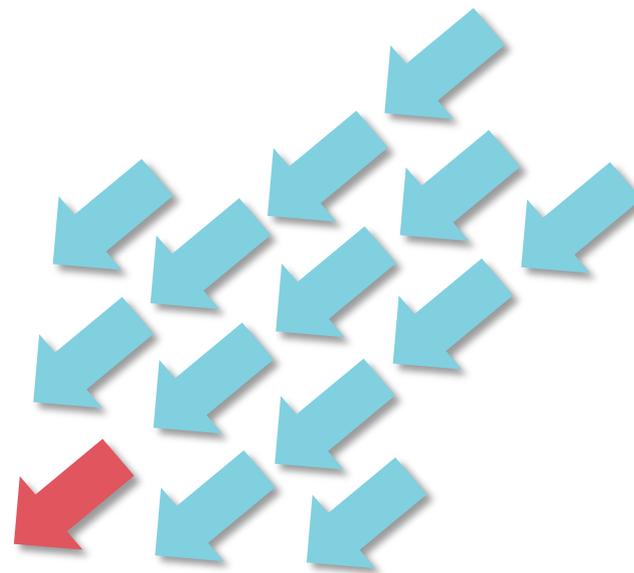
Stakeholder engagement

With the goal of developing a practical and transparent evaluation framework, the project team engaged with over 30 local, state and national public and private organizations ([Appendix 3](#)) to identify the Framework's scope and metrics. This has been essential in ensuring that the Framework will meet the information needs of PHSKC and as many stakeholder groups as possible. Stakeholder engagement is an ongoing process as PHSKC envisions the Framework to be a dynamic tool that will adapt to the availability of new data sources, changing information needs, and the introduction of new health reform initiatives.

Health reform evaluation synergy in Washington state

During the course of the stakeholder engagement process, it became clear that there was a need for increased collaboration and synergy among local and state efforts to evaluate the impacts of health reform on health care and health outcomes in Washington. This notion planted a seed that has grown into a call for a state and local level meeting of public health and health care organizations to assess the current landscape of health reform evaluation efforts, clarify common barriers to conducting practical and rigorous evaluation, and identify opportunities for synergy across agencies, sectors, and jurisdictional boundaries. This high-level health reform synergy meeting is expected to take place in the Fall of 2014.

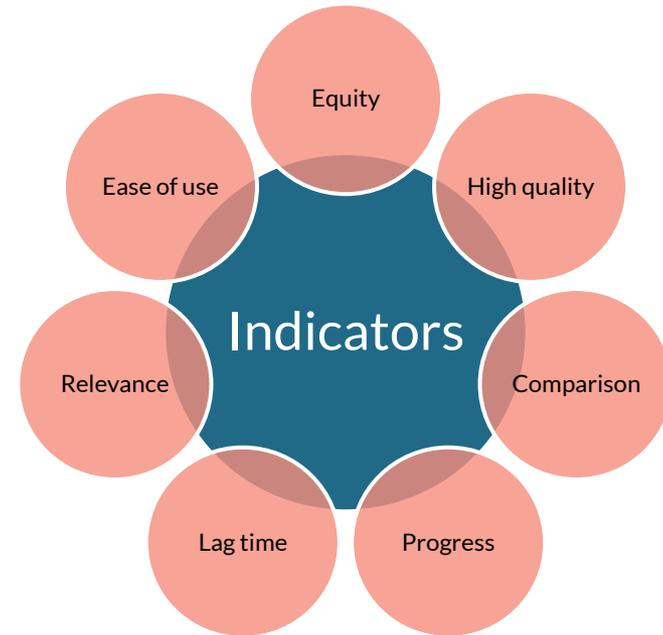
PHSKC has also engaged with the [Healthy Washington Coalition](#) and individual community-based organizations to ensure that the discussion around how to unify health reform evaluation in Washington state occurs at all levels of government and civil society. Action steps and a work plan for this partnership will be formed towards the end of 2014.



Selection criteria for indicators

Using the following criteria, an iterative and systematic process was used to identify indicators within each topic and indicator area:

- Equity:** The indicator allows assessment of as many people and subpopulations as possible.
- High quality:** Data are consistently available and reliable.
- Comparison to benchmarks** (other county, state, nation): The indicator is standardized and comparable to benchmarks and other geographic units of analysis (e.g. HP2020 LHIs, U.S. Surgeon General's National Prevention Strategy, WA, USA).
- Measure meaningful progress:** There is a plausible causal relationship between the ACA and the indicator. Data will be available frequently enough to measure a change (periodicity).
- Lag time:** The delay between the measurement period and attainment of the data is reasonable (i.e. the indicator remains sufficiently actionable and relevant).
- Relevance:** The indicator reflects specific policy goals or programs related to the ACA. The indicator addresses sufficiently important and relevant QA and evaluation questions posed by stakeholders in King County.
- Ease of data collection and use:** Data collection, management, and analysis of the indicator can be conducted in a manner that efficiently uses available resources.



QA and Evaluation questions

The relevance of indicators to two sets of key questions was a primary consideration. QA questions are more urgent and are best answered with a real-time monitoring approach, and are primarily focused on access to care and health system capacity, two crucial ACA priorities, and are described on [Page 19](#). Evaluation questions are geared towards a longer-term perspective, address broader questions about how the ACA will impact health care and health, and are described on [Page 20](#). Each question will be assessed through an equity lens wherever possible.

Key QA questions for monitoring ACA impact in King County

Question	Underlying Motivation	QA Question	Analytic Approach
1	While a primary goal of the ACA is to decrease inequity in health insurance and health care access, variation in primary care provider availability across King County may lead to inequitable access to care.	Among individuals newly enrolled in insurance through the Exchange or Medicaid expansion, is access to primary care providers similar across sub-county geographical areas?	Real-time monitoring of sub-county enrollment data and network adequacy and health provider capacity.
2	Increased demand and variations in reimbursement and referral mechanisms may create differential barriers to primary care access across King County. Health care provider availability to accept new Medicaid patients will potentially decrease in the short term.	Is access to primary care providers similar across payer types and/or individual plans?	Real-time monitoring of payer type- or plan-specific enrollment data and network adequacy and health provider capacity.

Key evaluation questions for assessing ACA impact in King County

Question	Underlying Motivation	Evaluation question	Analytic approach
3	Certain vulnerable populations are expected to experience improved insurance coverage and access to care: <ul style="list-style-type: none"> Adults ≤ 138% FPL (Medicaid expansion) Adults 139-400% FPL (Subsidies for Qualified Health Plans) Jail Population (Medicaid expansion) 	Has access to health care services increased and become more equitable?	Before-and-after comparisons of rates of appropriate care-seeking behavior across equity categories.
4	While there are targeted efforts through the ACA to improve quality of care, this may be complicated by increased burden on providers and the overall health system.	Has the quality and patient experience of health care improved?	Before-and-after comparisons of claims-driven quality indicators and patient satisfaction indicators.
5	Increased utilization of primary care is intended to reduce the number of ambulatory care sensitive hospitalizations and avoidable ED use.	Has improved utilization of primary care reduced inefficient use of health care resources due to lack of equitable access to primary care?	Before-and-after comparisons of hospital discharge data.
6	While access to health care may increase, it is unclear whether there will be a short or medium-term effect on population health outcomes.	Has the health of the overall and vulnerable populations improved?	Before-and-after comparisons of self-reported health status across equity categories.
7	The direction of change, if any, in the per capita cost of health care is uncertain. Short-term increases are possible from higher utilization and indirectly higher prices in the face of constrained supply and provider capacity, but, as populations may become healthier over time, lower costs are possible.	Has the per capita cost of health care and health insurance changed over time?	Before-and-after comparisons of per-capita claims (by primary, specialty, hospital inpatient/ED services) and premium rates.

Priority subgroups

The Framework has been designed to assess ACA impact among the total population in King County. However, particular focus will be placed on certain **priority subgroups** highlighted in ACA legislation:

- Newly eligible Medicaid population (Adults with household income \leq 138% of the Federal Poverty Level [FPL])
- Lower-income individuals eligible for HBE subsidies (Adults 139-400% FPL)
- Immigrants with less than 5 years of U.S. residence (eligible for HBE subsidies, but not Medicaid)

Though these have been identified as priority subgroups, detailed household income and immigration status are not included in many surveys and vital statistics datasets. Accordingly, indicators in the Framework will typically not be reported for these subgroups defined as above.

Equity lens

Health disparities will be highlighted by passing the Framework through an **equity lens** to present findings, when possible, by age group, gender, race/ethnicity, payer type, socioeconomic status, and place:

- Age
- Gender: female, male
- Race/ethnicity: American Indian/Alaska Native (AIAN), Black, Asian, Native Hawaiian/Pacific Islander (NHPI), Hispanic, Multiple Race (Multiple), and white.
- Payer type: Medicaid, commercial
- SES: income, FPL, education, etc.
- Place: 4 regions, 48 [Health Reporting Areas](#) (HRAs), ZIP code

Secondary (existing) data sources

- **American Community Survey:** The American Community Survey (ACS) is an ongoing Census Bureau survey that provides information on household characteristics, such as insurance status and household income. Data are available at the census tract level.
- **Behavioral Risk Factor Surveillance System:** The Behavioral Risk Factor Surveillance System (BRFSS) is a national system of health-related telephone surveys that collect state and area-level data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. BRFSS collects data in all 50 states as well as the District of Columbia and three U.S. territories. BRFSS also has an enhanced sample for PHSKC, which allows more granular view of BRFSS data in the region.
- **Comprehensive Hospital Abstract Reporting System:** The Comprehensive Hospital Abstract Reporting System (CHARS) is a population-based dataset derived from hospital billing systems. Administered and distributed by the Washington State Department of Health and provided to PHSKC, it contains demographic and residential information, billed charges, diagnoses and procedure codes and other medical information on all inpatient admissions to Washington State acute care hospitals.
- **Health Benefits Exchange:** The Washington Health Benefit Exchange (HBE) was created in state statute in 2011 as a “public-private partnership” separate and distinct from the state. The Exchange is responsible for the creation of Washington Healthplanfinder, an online marketplace for individuals, families and small businesses to find, compare, and enroll in qualified health insurance plans. Enrollment data and annual premium cost data (total and premium after employer contributions and ACA subsidies) will hopefully become available in 2014 from the Washington HBE. The exact organization and level of detail of these data are pending additional discussions and guidance.
- **King County Mental Health, Chemical Abuse and Dependency Services Division:** The King County Mental Health, Chemical Abuse and Dependency Services Division (MHCADSD) is one of four divisions in the King County Department of Community and Human Services (DCHS). MHCADSD routinely collects programmatic data (i.e. not population-level) related to behavioral health and chemical dependency services provided to King County residents.
- **Office of the Insurance Commissioner:** The Office of the Insurance Commissioner (OIC) serves to regulate Washington’s insurance industry. It fulfills this role in the health insurance marketplace by ensuring that insurers follow rules and regulations around insurance rates, coverage, and provider network adequacy. OIC requires commercial plans and providers to submit regular information, which, pending a data sharing agreement, is available for use. As these data sources represent commercial plans only and provider availability (i.e. panel status) is not included, it is still unclear what these data could be used for with regards to QA and evaluation of the ACA.

Secondary (existing) data sources, continued

- **ProviderOne:** The Washington State Health Care Authority and Department of Social and Health Services (DSHS) have consolidated Medicaid, medical and other selected payments into a single provider payment system called ProviderOne. The second phase of the project will expand payment processing to include social service providers such as community residential providers, home care agencies, and medical providers that did not transition in the first phase of the project. The current ProviderOne database contains Medicaid fee-for-service (FFS) claims and managed care encounter data (i.e. pseudo-claims data).
- **Public Health Center Continuity of Care Monitoring:** PHSKC runs monthly continuity of care reports for its Public Health Centers to monitor clinical provider capacity and the degree to which patients are seeing regular providers over time. These reports track full time equivalents, number of patients assigned, and number of patient visits by primary care provider. Though it will be challenging to disentangle trends in these data from non-ACA factors (e.g. closure of Public Health Centers in 2015), these reports serve as an example of integration between public health QA and evaluation and the health care delivery system.
- **Treatment and Assessment Report Generation Tool:** The Treatment and Assessment Report Generation Tool (TARGET) is a web-based management and reporting system for client services provided by approximately 525 reporting agencies throughout the state. Users include county governments, tribes, and non-profit organizations that provide Division of Behavioral Health and Recovery (DBHR, division of DSHS) client services. MHCADSD submits client services data to the TARGET database.
- **Vital Statistics:** Birth and death certificate data reported to the Washington State Department of Health by county vital records units are processed into statistical files and transmitted to PHSKC for public health monitoring and evaluation.
- **WA State Immunization Information System:** The Immunization Information System (Child Profile) is a Web-based tool used by healthcare providers and schools, which serves as a lifetime registry of immunization records in Washington state. It can provide data for the Framework on the coverage of childhood immunization (19-35 months).
- **WA State Medical Association:** The Washington State Medical Association (WSMA) maintains an up to date directory of all physicians and physician assistants in WA state (both WSMA members and non-members). After PHSKC presented its initial [mystery shopper survey](#) work to WSMA, the WSMA Executive Committee granted approval for PHSKC to use this provider directory to support future mystery shopper surveys of primary care and specialty providers.
- *Note: Data sources considered but not included in the Framework are listed in [Appendix 4](#).*

Primary data collection and analysis

Overview

Due to the substantial expense of collecting primary data and the Framework's focus on leveraging existing data assets through advocating for data transparency, PHSKC will likely employ limited use of primary data collection for QA and evaluation of ACA impact. Development of the Framework occurred during the first open enrollment period for Washington Healthplanfinder and the launch of expanded Medicaid coverage. As King County accrued tens of thousands of enrollments, internal and external stakeholders began to question with greater urgency whether the local health care system would have the capacity to absorb the influx of new enrollees. There was a particularly high level of concern around the Federally Qualified Health Centers (FQHCs) of King County (i.e. Public Health Centers, Community Health Centers, tribal clinics), which form the backbone of the county's primary care safety net. To meet this emerging information need and address a data gap in the Framework, PHSKC launched primary data collection activities to assess changes in access to care among adult Medicaid beneficiaries.

Medicaid Managed Care Organization Provider Directories

As is true with the majority of health insurance companies, the online provider directories of Medicaid Managed Care Organizations (MCOs) contain not only contact information for each provider, but also whether or not the provider is accepting new patients. If the MCO directories were shown to be updated and accurate, PHSKC hoped to leverage these directories in an ongoing effort to monitor access to care.

Using online MCO provider directories, a software tool ([iRobotSoft](#)) was used to extract data on contact information and whether primary care

providers (PCPs) were accepting new patients. The 5 MCOs contracted to provide Medicaid managed care services in King County include Amerigroup, Community Health Plan of Washington (CHPW), Coordinated Care Corporation, Molina, and UnitedHealthcare Community Plan.

Though Medicaid comes in two flavors – managed care and Fee-For-Service (FFS), PHSKC focused this effort on managed Medicaid only for several reasons. Pre-ACA, managed Medicaid accounted for the majority (~65%) of Medicaid beneficiaries in WA state, and under Medicaid expansion this trend will continue with the majority of new enrollees being assigned to or choosing managed Medicaid. FFS-contracted providers are included in the Health Care Authority's ProviderOne online directory (a separate directory from the MCO directories), but this directory does not include panel status. Finally, there is substantial overlap between the population of MCO-contracted and FFS-contracted providers in King County.

Extracted provider data were cleaned and then de-duplicated using CDC's National Program of Cancer Registries' [Link Plus](#) software to develop a final merged population of primary care provider-locations across the 5 MCOs. As providers may practice at multiple locations, and have different panel status across these locations, the unit of analysis was the provider-location as opposed to the provider. PCP-locations were assigned to one of four sub-county regions by ZIP code. Instances of duplicate phone number-provider-location events were identified. In such cases, all but one instance were randomly dropped from the dataset. This dataset provides a listing of all King County MCO-contracted PCPs, phone numbers, locations, and whether they are accepting new Medicaid patients according to an online directory.

Primary data collection and analysis, continued

Mystery Shopper Survey

To meet the need for access to care information specific to the safety net population, PHSKC fielded a **mystery shopper survey** (MSS) of PCP availability and appointment wait times for adult Medicaid clients, prior to ACA implementation in December 2013 and again in April 2014, four months after Medicaid expansion. A MSS is a survey for which the interviewer's purpose is unknown by the respondent. Interviewers, acting as uninsured residents of King County, called PCPs listed on the websites of the five MCOs serving King County to determine if PCPs were accepting new Medicaid patients as per their online directory status. PHSKC adapted an [approach](#) used by the Massachusetts Medical Society for the past 9 years. The primary objectives of the survey were to:

1. Assess the accuracy of MCO websites.
2. Compare access to care for adult Medicaid beneficiaries before and after Medicaid expansion.

The cleaned online directory dataset was used as a sampling frame to select random samples by region of adult PCP locations. A mystery shopper telephone survey questionnaire for adult PCPs was developed through adapting instruments used by the Massachusetts Medical Society for their annual [Patient Access to Care Study](#). The baseline MSS was fielded from December 4 to December 16, 2013, and the follow-up survey from April 3 to May 13, 2014. With a target sample size of 519 complete interviews per survey, the MSS was designed to at minimum detect a change of 12 percentage points in the [percentage](#) of PCPs accepting new adult Medicaid patients for the county and by region, using an Adjusted Wald test for the difference in two proportions, assuming 80% power, a significance level of 5%, and applying a Finite Population Correction.



Data analysis

The indicator matrix, included as [Appendix 5](#), includes the selected list of 32 indicators, along with relevant sources of data, rationales for inclusion, and general evaluation questions we aim to address for each indicator. The indicator matrix is a dynamic document subject to changing data availability and stakeholder feedback.

While specific analysis plans will be fully developed during later years of this project, we generally will aim to conduct data analysis using the following three approaches:

1. **Before-after-comparison (BAC)** comparing pre- and post-ACA time periods, using January 1, 2014 as the dividing line.
2. **Trend analysis.** In the beginning years of this project, trend analysis will be possible only with routinely collected administrative data, such as health insurance claims. During the later years of this project, vital statistics and survey data will also be included in assessing trends in health care and health outcomes.
3. **Disparity analysis** using pairwise comparison (e.g. range difference, range ratio) and summary measures, using [HD*Calc](#) (Health Disparities Calculator, National Cancer Institute), where possible.



Data analysis limitations

Comparison group

The fundamental purpose of the Framework is to assess the impact of the ACA in King County. Natural experiments are possible (for example, comparisons with counties and states not participating in Medicaid expansion). King County's progress can also be benchmarked against national data. Additionally, while historical trends may limit inferences around some indicators, there are sufficient data prior to ACA implementation to use techniques to infer causal effects.

Causal inference

BAC is a limited approach for inferring causality – that an intervention such as the ACA leads directly to an observed change in health care or health. This is because BAC is subject to historical confounding, where an apparent change over time in a health outcome is due in part or in whole to a third unmeasured factor, such as local economic changes. We can partially account for potential historical confounding using the following statistical techniques:

- Assessing trends in other measures (a “non-equivalent dependent variable”), which act as a quasi-control for historical trends by targeting a measure unlikely to be affected by the ACA.
- Interrupted time series makes uses of multiple time points before and after an intervention to assess the degree to which a trend changes significantly around the time of implementation.
- Difference-in-difference models use a population group as its own control group to examine changes in outcomes, compared to other populations in the county or state.

Reliance on secondary data

The Framework relies almost entirely on secondary data, which reduces resources required for data collection, but limits our flexibility in analyzing the data. Such limitations include:

- Surveys may not occur in the timeframe desired, include target populations, or include demographic data to analyze disparities.
- Data may only be available for specific populations (e.g. CHARS, Community Checkup), reflecting only a limited view of the entire population and health system.

Ecological analysis

The majority of the Framework's indicators are routinely analyzed at the population and sub-population level (cost-effective, practice-oriented approach), rather than tracking a cohort of individuals over time for changes in health care and health outcomes (more expensive, research-oriented approach). Changes in health occurring at the population level can sometimes be quite different than changes at the individual level, a methodological challenge referred to as the ecological fallacy.

Data lags

Many of the indicators will not have comparable baseline and follow-up data for at least 2 years from the 1/1/14 date for activation of ACA-stimulated insurance plans. Thus, we need to ensure that evaluation questions, with the goal of producing actionable information, are developed with this consideration in mind.

Information barriers

There is always an opportunity cost for acquiring information to answer QA and evaluation questions. This is the rationale behind including ease of procurement as a selection criterion for indicators in the Framework. However, barriers to accessing information come in all shapes and sizes, and this report would be incomplete without a description of the barriers that PHSKC faces in accessing the information necessary to fulfill its QA and evaluation role.

In an era of open data ([King County Open Data](#)), health care transformation ([King County Health and Human Services Transformation](#)), greater efficiency of government spending on health ([triple aim](#)), and an increased focus on cross sector partnerships ([Accountable Communities of Health](#)), PHSKC deems it essential to explore new realms of data, including non-health data sources, in order to fulfill its role as King County's primary provider of community wide health information. In pursuit of new data sources, including health insurance enrollment records, health insurance claims records, and electronic health records, PHSKC faces barriers to accessing this information for public benefit. PHSKC deems it important to highlight the difference between data that do not exist, and data that exist but are inaccessible due to historical, legal, or other reasons. The latter represents an opportunity where strengthened cross sector and cross agency partnerships can usher in a new age of increased public accountability and data transparency.

With this in mind, [Page 29](#) summarizes some of the information barriers that PHSKC faces in pursuit of building the Framework. The purpose of presenting this information is not to praise or criticize individual agencies, but rather to identify some of the major bottlenecks for meeting the ACA-related information needs of our county.

Timeline

New partnerships and new data sources are identified on a continual basis. In order to prepare this baseline report, PHSKC had to draw a line in the sand and only consider data sources and partnerships developed prior to this cutoff point. With this in mind, this report is a summary of work conducted between July 1, 2013 and June 30, 2014.

For indicators with confirmed data sources, [Page 30](#) summarizes the approximate dates by which we may expect to begin to draw baseline and follow-up information for analysis. This forecast is subject to updates, based on additional information on data availability.

Major barriers to acquiring critical ACA-related data for King County

With access to the data sources listed in the table below, PHSKC would be able to answer a variety of ACA-relevant questions, including:

1. HBE data: For which subpopulations have Medicaid and QHP enrollment efforts been most and least effective?
2. Claims data: Has the total cost of health care changed, and if so, has it changed similarly across subpopulations?
3. Patient experience data: Are newly insured patients satisfied with their primary and specialty health care? Similarly across subpopulations?

Data source	Data needs	Major barriers	Potential next steps
HBE	Individual-level enrollment data for Medicaid and Qualified Health Plan (QHP) enrollments	Lack of clarity regarding ACA legislation that limits uses of enrollment data	Meetings with HBE around interpretation of ACA legislation and identification of alternative pathways forward
Health care delivery system	Electronic health records (EHRs)	HIPAA restrictions; no central database for EHRs	Initial conversations with select health care delivery systems around the idea of using EHRs for QA and evaluation of ACA impact
Health insurance carriers	Commercial plan claims data	Lack of mandatory requirement in WA state for all plans to submit claims data to All-Payer Claims Database	PHSKC will continue to follow and participate in APCD development, and advocate for comprehensive coverage and equitable access to information
ProviderOne	Medicaid claims data	HIPAA restrictions; time to set up DSA	DSA is proceeding as planned and access to data is expected in near future
WA Health Alliance	Your Voice Matters patient experience survey data	Data owned by consulting firm hired to field survey; data can be purchased at great expense	Investigation of how CAHPS data can be leveraged to look at changes in patient experience of care post-ACA
-	Health care system capacity information	Lack of routine local data sources for provider availability and health care system capacity	Pending funding, PHSKC hopes to continue to field mystery shopper surveys of access to care

DSA - data sharing agreement; CAHPS - Consumer Assessment of Healthcare Providers and Systems; HBE - Health Benefit Exchange; HIPAA - Health Insurance Portability and Accountability Act.

Timeline for acquiring pre- and post-ACA data used in the Framework

Data source <i>Click source for results</i>	Relevant question Link to questions	Pre-ACA data acquisition date [†]	Post-ACA data acquisition date [‡]	Time from 1/1/14 to post-ACA data acquisition
ACS	3	12/6/14	12/6/15	23 months
BRFSS	3-6	4/1/14	4/1/15	15 months
CHARS	3-4, 7	1/1/15	1/1/16	24 months
HBE	1-3	TBD	TBD	TBD
Mystery shopper survey	1, 3	1/1/14	6/1/14	5 months
ProviderOne	4-5, 7	TBD	TBD	TBD
Vital statistics	6	12/31/14	12/31/15	24 months
WSIIS	6	3/1/14	9/1/14	8 months

[†]Pre-ACA = 2013 or any time period before 2014.

[‡]Post-ACA = After January 1, 2014.

ACS – American Community Survey; BRFSS – Behavioral Risk Factor Surveillance System; CHARS – Comprehensive Hospital Abstract Reporting System; HBE – Health Benefit Exchange; TBD – To be decided; WSIIS – Washington State Immunization Information System.

Baseline findings – King County in the pre-ACA era

This report is not intended to be an all-inclusive warehouse of data on all health indicators. Resources for comprehensive health data exist in King County, including the continuously updated PHSKC [Community Health Indicators](#) and [Communities Count](#) websites. At these websites, you will find comprehensive data and figures for most of the indicators included in the Framework, including data broken down by Health Reporting Area, comparisons with WA state, the U.S., and Healthy People 2020 goals, maps by Health Reporting Area or ZIP code, and trends.

Readers may also notice that this report does not provide targets for each indicator. Between now and the end of 2014, PHSKC expects a new dialogue around how best to unify health reform evaluation efforts across WA state. Governor Inslee's [Results Washington](#) framework provides state-level targets for many indicators relevant to health reform. If synergy among WA state health reform evaluation efforts increases over the next 6-12 months, relevant ACA performance targets will likely be a natural topic for collaboration, as well as new indicators to be added to the Framework.



Assessing health care disparities by demographic characteristics in King County

This figure summarizes health care disparities for 23 subgroups all compared to the overall King County population.

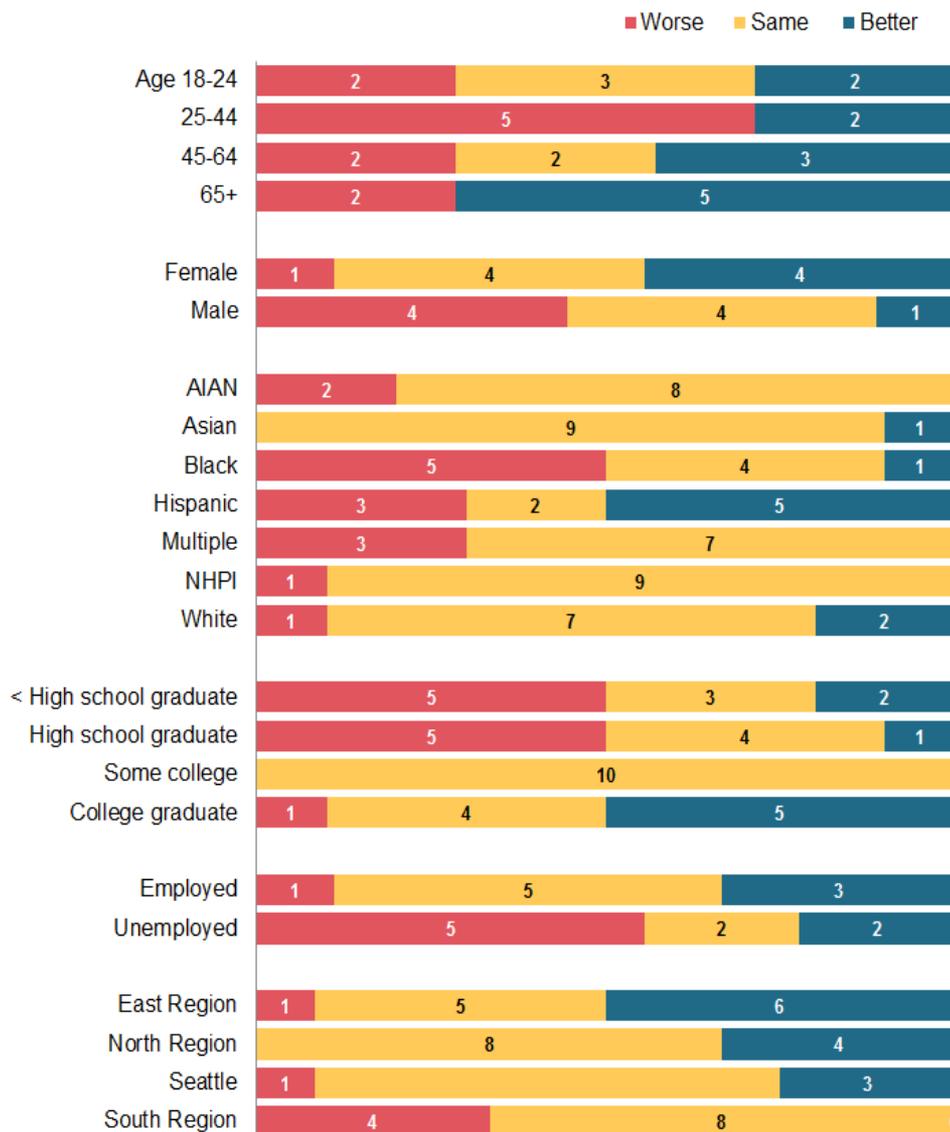
It shows the number of indicators for which subgroups experienced significantly different outcomes than the overall King County population.

Subgroups are compared to the county on anywhere from 7 to 12 ACA-relevant indicators ([Appendix 6](#)), depending on availability of demographic information, including insurance coverage, unmet medical need due to cost, an annual checkup, an annual dental visit, mammography screening, colorectal cancer screening, cholesterol screening, flu vaccination, childhood vaccination, fair/poor overall health, adequate prenatal care, and uncompensated hospital care.

If no disparities existed in King County, this figure would be colored completely yellow.

We see the power of **social determinants of health**, with race/ethnicity, education, and employment playing a large role in shaping individual health care outcomes.

Notably, this figure surely underestimates true disparities for certain small subgroups (e.g. AIAN, NHPI) due to insufficient data.



Assessing health care disparities by Health Reporting Area in King County

This figure is intended to show the **power of place**, by summarizing health care disparities for 48 Health Reporting Areas (HRAs) all compared to the overall King County population.

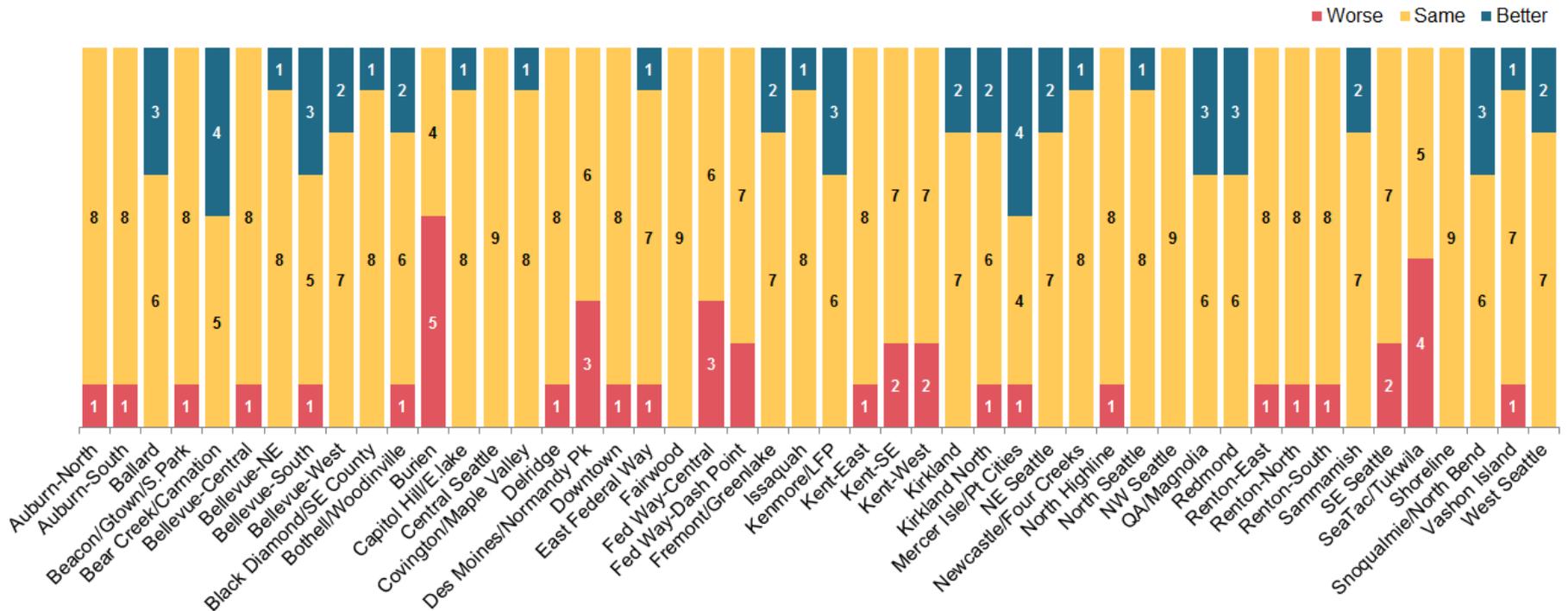
It shows the number of indicators for which HRAs experienced significantly different outcomes than the overall King County population.

HRAs are compared to the county for 9 indicators representing adequate access to and utilization of health care, including

insurance coverage, unmet medical need due to cost, an annual checkup, an annual dental visit, meeting recommendations for mammography screening, colorectal cancer screening, flu vaccination, fair/poor overall health, and adequate prenatal care.

Burien, Des Moines/Normandy Park, Federal Way, Southeast Seattle, and SeaTac/Tukwila experience a disproportionate burden of reduced health care across the board.

The geographic disparities shown here are an example of why it is important for King County to look at data below the county level.



Assessing health care disparities by insurance payer type in King County

This figure makes use of the Washington Health Alliance county-level Community Checkup [data](#) to assess differences in access to care, quality of care, and population health outcomes comparing Medicaid and commercially insured patients in King County.

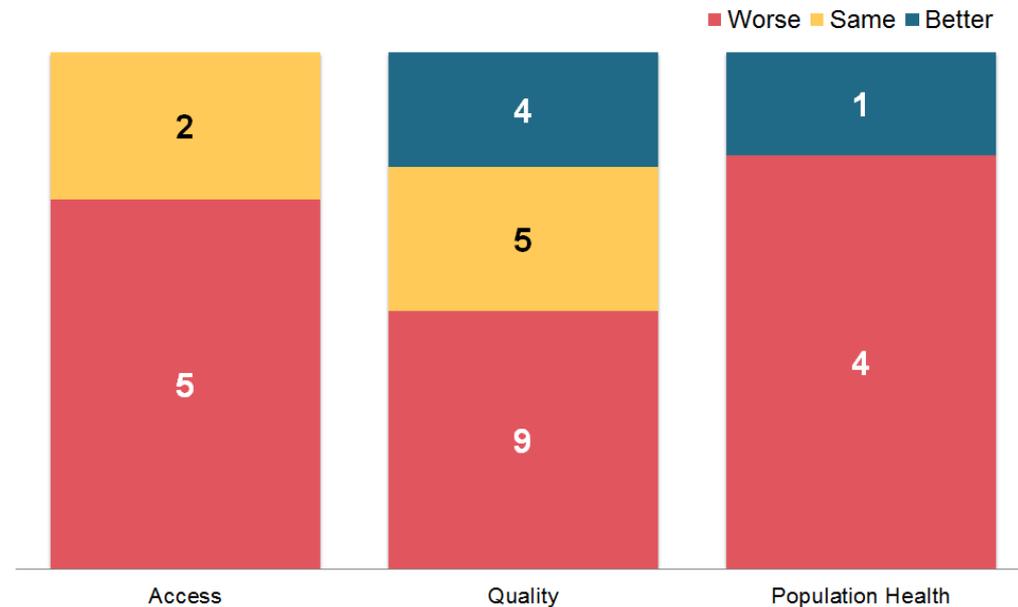
It shows the number of indicators for which King County Medicaid patients experienced significantly different outcomes than commercially insured patients.

Access to care comprises access to primary care broken down by 7 age categories across the lifespan.

Quality of care includes indicators for appropriate use of care (e.g. avoidance of antibiotics for common cold), diabetes care, heart disease care, and use of prescription drugs (e.g. treatment of high blood pressure).

Population health includes indicators for use of clinical preventive services (e.g. chlamydia screening).

Overall, we see worse health care outcomes among Medicaid patients compared to commercially insured patients.



Access to care

Access to care represents the coverage, affordability, and availability of health care, corresponding with the ACA's chief goal of expanding access to affordable health insurance.

Access to care is identified by Healthy People 2020 as a key topic area.

To assess access to care, the Framework will be used to track insurance coverage, unmet need, and affordability of health care.

Tracking enrollment in King County – October 1, 2013 through August 7, 2014

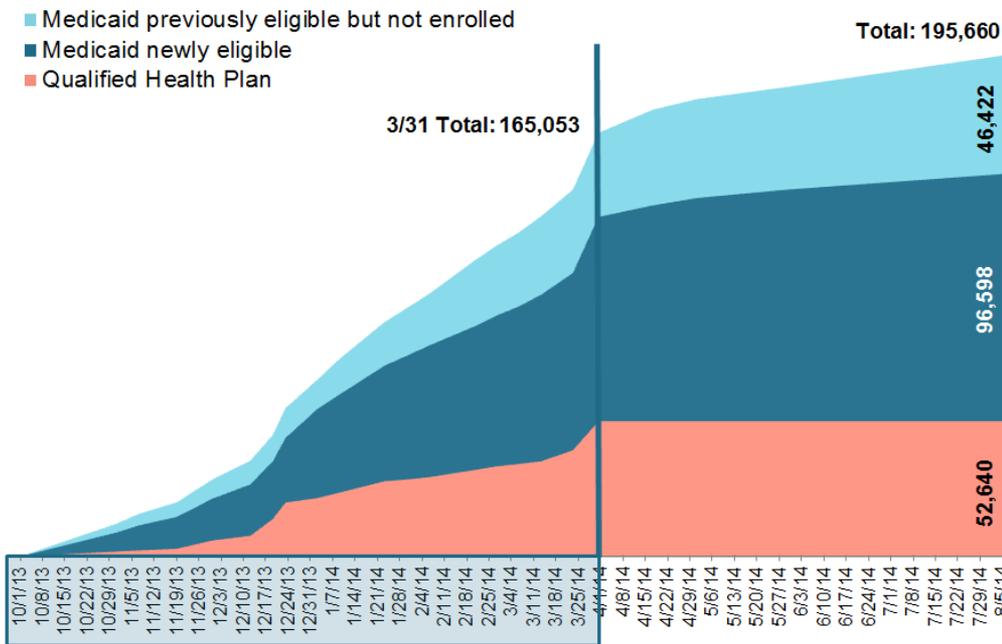
The first open enrollment period for new health insurance options took place in 2013 and 2014.

The state’s [Medicaid](#) program was expanded to include adults with incomes at or below 138% of FPL. Washington [Healthplanfinder](#) was implemented to coordinate Medicaid enrollment and offer new QHPs (ACA-compliant, commercial plans) to individuals. Individuals with incomes between 139-400% of FPL are eligible for tax subsidies to increase the affordability of QHP premiums.

Organizations in King County partnered on the Coverage Is Here King County initiative and, through collective efforts, **195,000** residents have enrolled in new coverage as of August 7, 2014, and Medicaid enrollments continue to accrue daily.

It is too early to measure the full impact of the coverage expansion but this report provides baseline data for future comparisons.

A sizeable portion (49%) of new enrollments in King County belong to adults aged 18-64 newly eligible for Medicaid. Though the previous insurance status of all enrollees is unknown, many were likely previously uninsured. This raises the important QA question of whether the health care system can adequately provide equitable, high-quality, and affordable health care to this expansion population.



Sources: WA Health Benefit Exchange and WA Health Care Authority. Historical estimates by APDE.

Adults (18-64) with no health insurance by Health Reporting Area, King County, 2008-2012 average

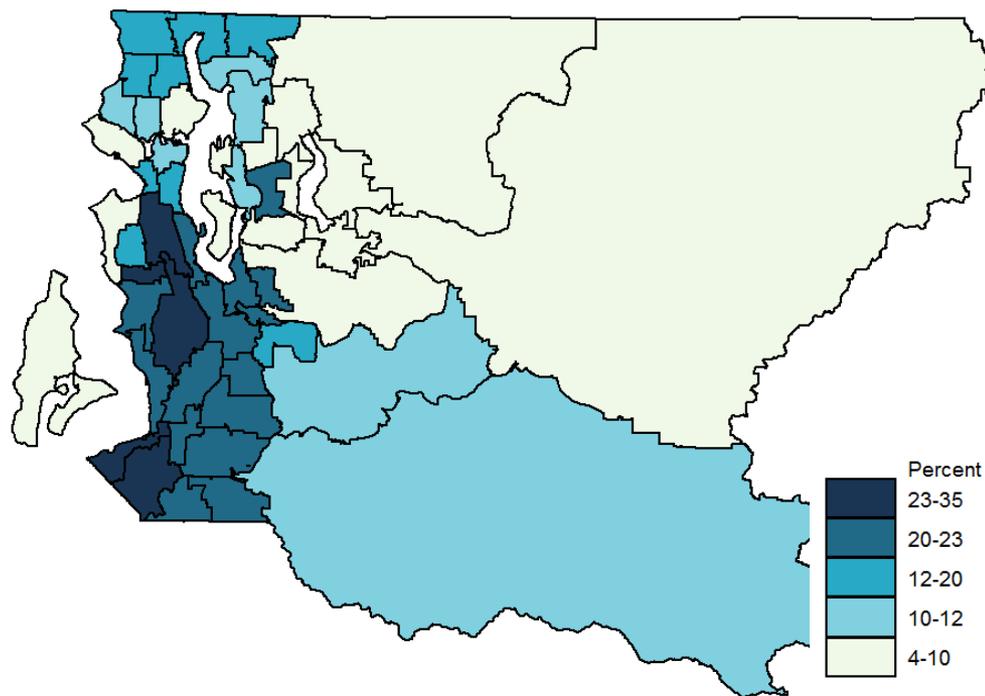
Without health insurance, most individuals cannot afford quality health care, leading to increased health disparities and lower quality of life overall.

In 2012, 16.4% of King County adults age 18-64, including 221,000 people, had no health insurance though this has likely decreased with insurance expansion through the ACA. 2014 data will be available in the Fall of 2015.

The county average masks racial, economic and place-based disparities. This figure shows that residents living in the southwestern areas of King County are most likely to be uninsured. Uninsurance rates range from a **low of 4%** in Sammamish and Mercer Island to a **high of 35%** in North Highline.

Enrollment in new health insurance options was heavily targeted to areas and subgroups with a high uninsurance rate. Thus, there is hope that groups with previous low insurance coverage will make rapid gains in moving closer to the county average.

Note: Adults age 65 and older are not included as uninsurance is rare due to high enrollment in Medicare.



Source: American Community Survey

Adults (18-64) with no health insurance at any point in the past year, King County, 2013

Health insurance coverage is typically assessed for a specific **point in time**.

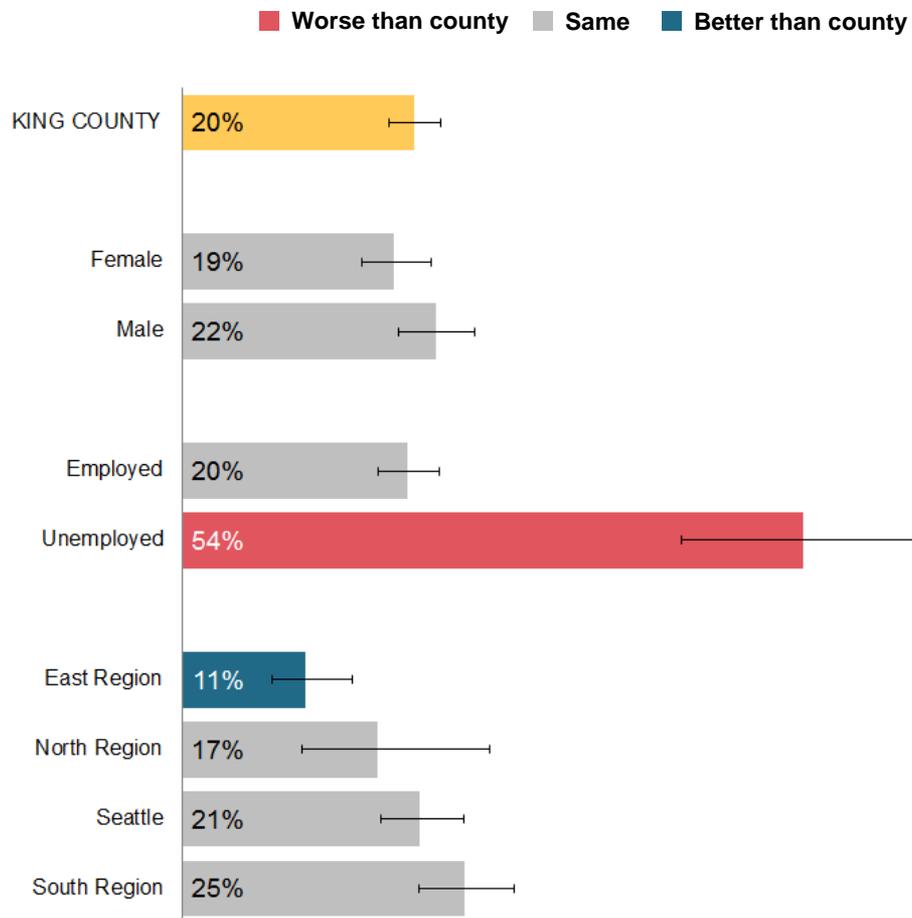
In 2013, additional information was asked about access to care, including whether or not an adult was uninsured **at any point** during the past year. The proportion of adults with intermittent health insurance coverage is higher than the proportion with coverage for the entire year.

As with point in time insurance coverage, we see demographic disparities with period insurance coverage.

Unemployed adults were almost **3 times more** likely to be uninsured than employed adults.

And adults living in East Region were about **2.3 times less** likely to be uninsured than adults in South Region.

Additional demographic breakdowns will be available with future years of data.



Source: Behavioral Risk Factor Surveillance System

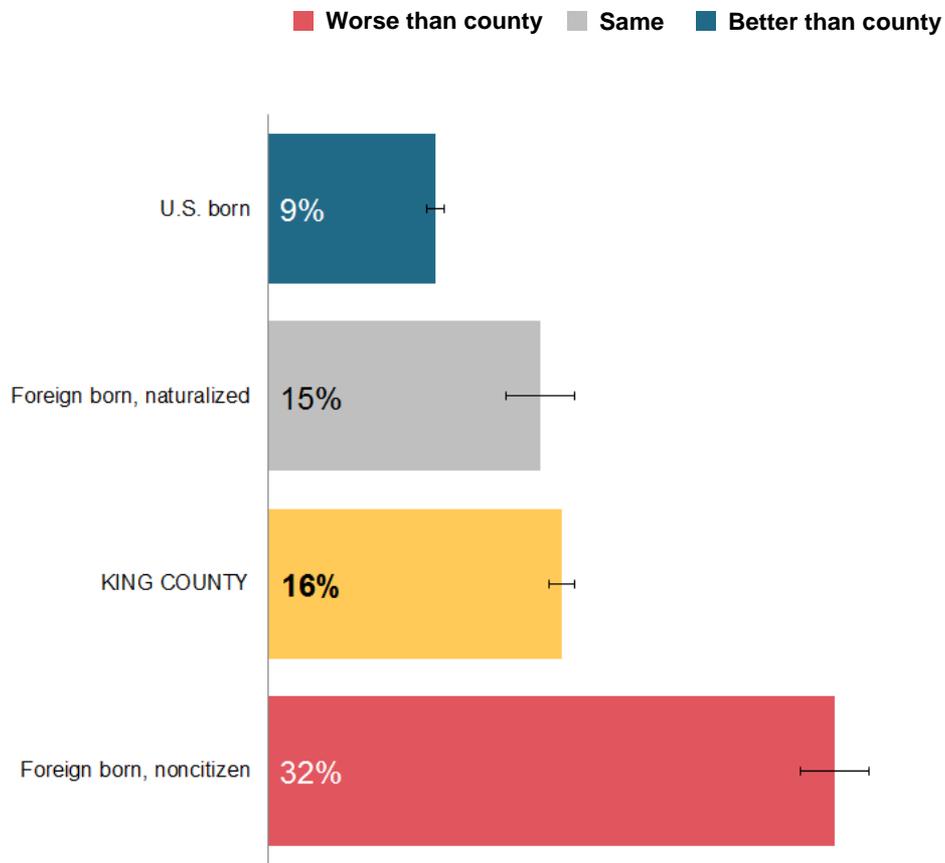
Adults (18-64) with no health insurance by place of birth and citizenship, King County, 2010-2012 average

Health insurance coverage shows marked disparities by place of birth and citizenship.

Foreign born, noncitizen adults were **3.6 times more** likely to be uninsured than U.S. born adults.

For adult foreign born noncitizens, insurance options are more restricted in that Medicaid eligibility requires residence for at least 5 years in the U.S. However, foreign born noncitizens are still eligible for tax credits on a QHP purchased through WA Healthplanfinder.

Identifying health disparities by citizenship status is challenging as most local surveys and data sources do not collect or report this information.



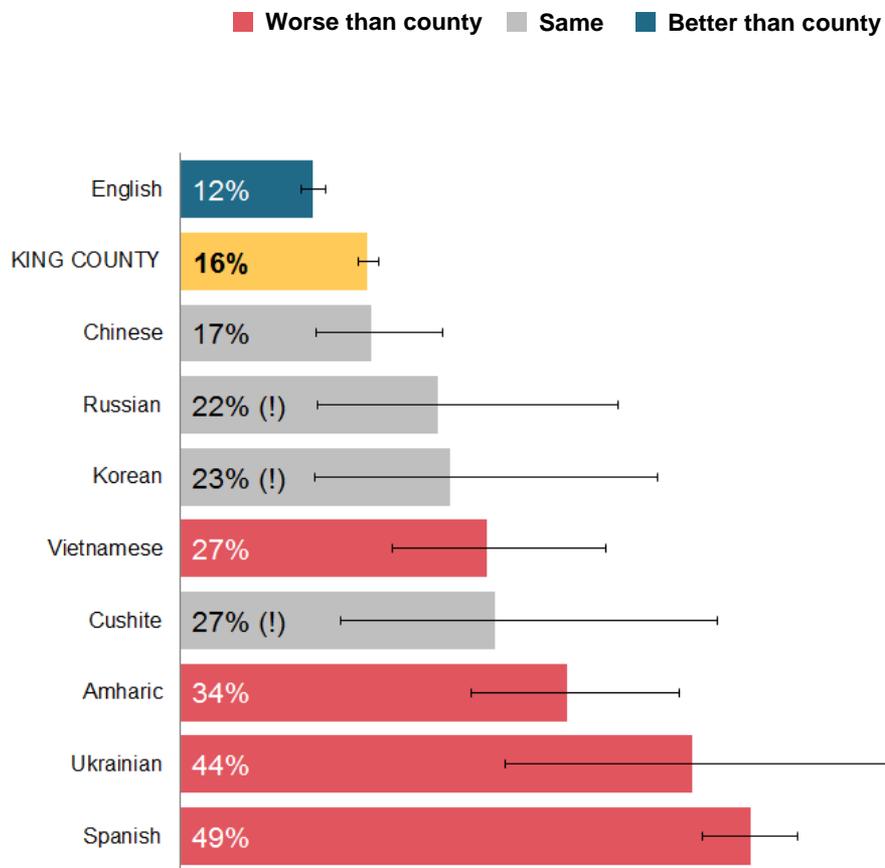
Source: American Community Survey

Adults (18-64) with no health insurance by language spoken at home, King County, 2010-2012 average

Health insurance coverage shows marked disparities by language.

Adults speaking Spanish or Ukrainian at home were roughly **4 times more** likely to be uninsured than adults speaking English at home.

Not only do language barriers impact access to health insurance coverage, but for those who do have insurance, language also plays a large role in shaping the experience of health care.



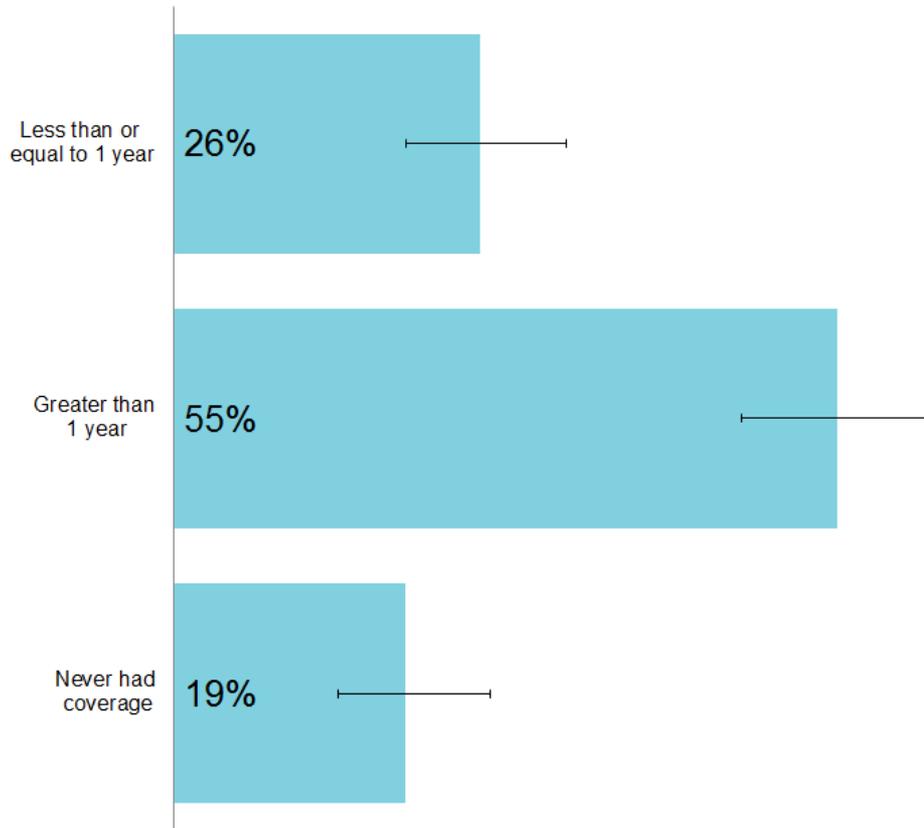
Source: American Community Survey, Public Use Microdata Sample

For uninsured adults (18-64), how long since their last coverage, King County, 2013

Also of interest, the majority of uninsured adults (81%) have had insurance coverage at some point in the past.

The majority of uninsured adults (74%) have been without health insurance for greater than one year.

Future years of data will allow assessment of continuity of coverage by demographic characteristics.



Source: Behavioral Risk Factor Surveillance System

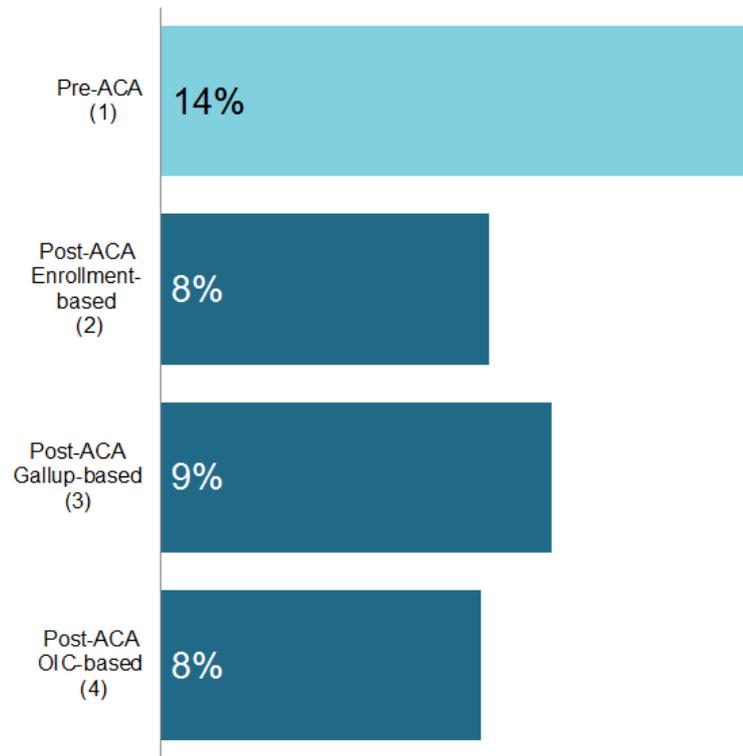
Comparing crude estimates of the King County adult (18+) uninsurance rate, early 2014

The PHSKC gold standard for health insurance estimates, the U.S. Census Bureau's American Community Survey, will not release 2014 insurance estimates until the Fall of 2015. The Behavioral Risk Factor Surveillance System, which also collects insurance status for adults, will have data available in the spring of 2015. In either case, local stakeholders will require estimates of the post-ACA uninsurance rate before these sources are available.

To meet this information need, using a variety of sources, we've estimated the percentage of adults (age 18+) who remain uninsured.

This figure shows that the adult uninsurance rate in King County may have fallen from 14% in 2012 to 8-9% by the end of the first quarter of 2014.

These estimates will be updated as additional information becomes available. For example, if PHSKC were to receive detailed enrollment data from the Health Benefit Exchange, these estimates could be improved.



1: US Census Bureau, American Community Survey, 2012.

2: Based on pre-ACA number of uninsured adults and Medicaid and QHP enrollments through Health Benefit Exchange

3: Multiplied Gallup Poll WA uninsurance rate by ratio of 2012 King County to Washington state uninsurance rate

4: Multiplied OIC's WA estimate of people newly insured by proportion of WA Medicaid/QHP enrollments in King County

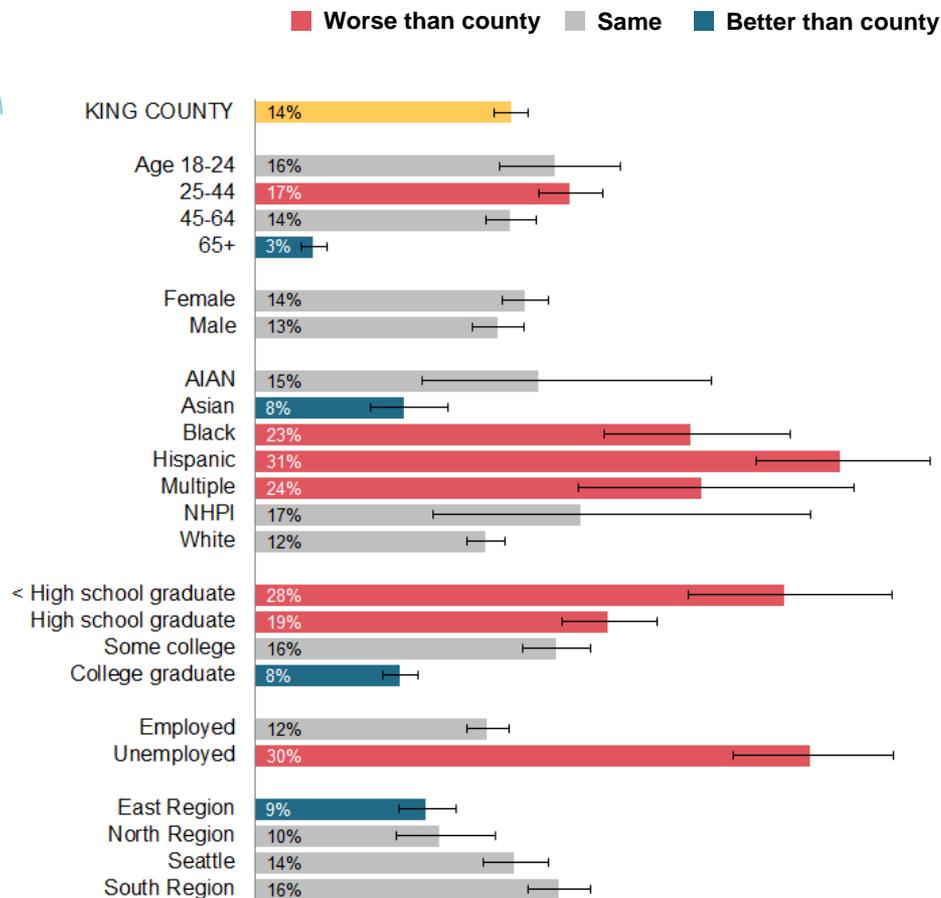
Adults with unmet medical need due to cost, King County, 2009-2013 average

Improving the affordability of health care is one of the key goals of the ACA.

In 2009-2013, 14% of adults reported they needed to see a doctor in the last 12 months but could not due to cost.

Hispanics were almost **4 times more** likely to have unmet medical need due to cost than Asian adults.

Adults with less than a high school education and unemployed adults were **3.5 and 2.5 times more likely** to have unmet medical need than college graduates and employed adults, respectively.



Source: Behavioral Risk Factor Surveillance System

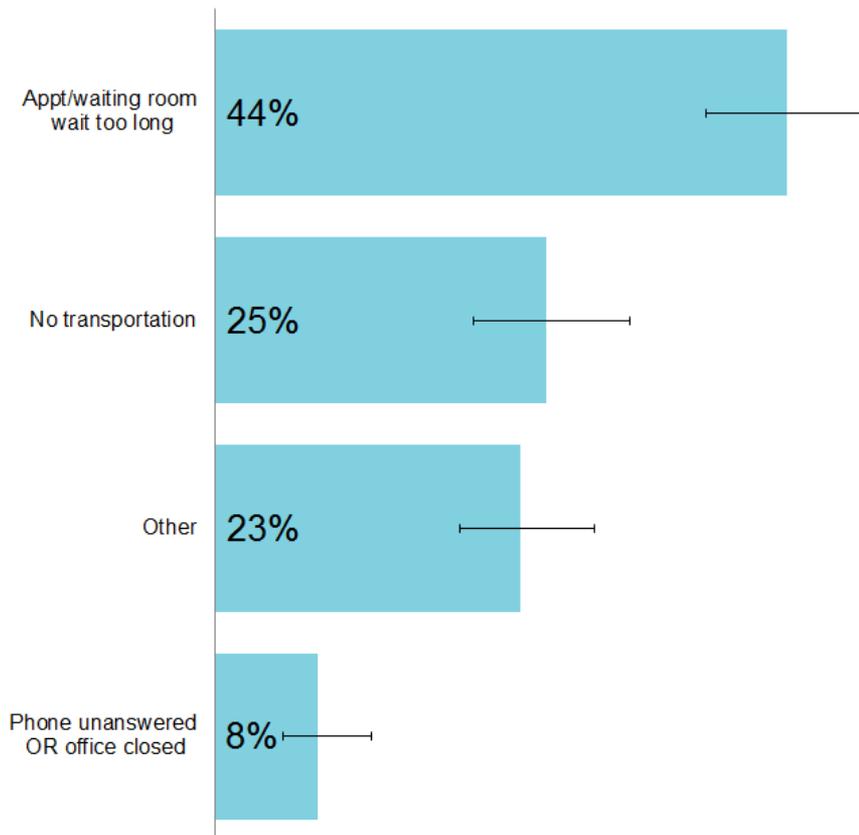
Unmet medical need due to non-cost-related reasons, King County, 2013

Cost is one reason why medical needs might go unmet; however, there may be additional factors.

In 2013, about 17% of adults delayed seeking medical care for reasons other than cost (roughly 260,000 adults). Of these, 44% did so because the wait time for an appointment or in the waiting room was too long.

This finding connects to the QA question around system capacity. If, for example, the primary care system is strained by the influx of newly insured individuals, will appointment wait times lengthen? And if so, will patients be turned away from seeking appropriate, cost-effective primary care and towards seeking costly urgent or emergency care?

Future years of data will allow assessment of reasons for delaying care by demographic characteristics.



Source: Behavioral Risk Factor Surveillance System

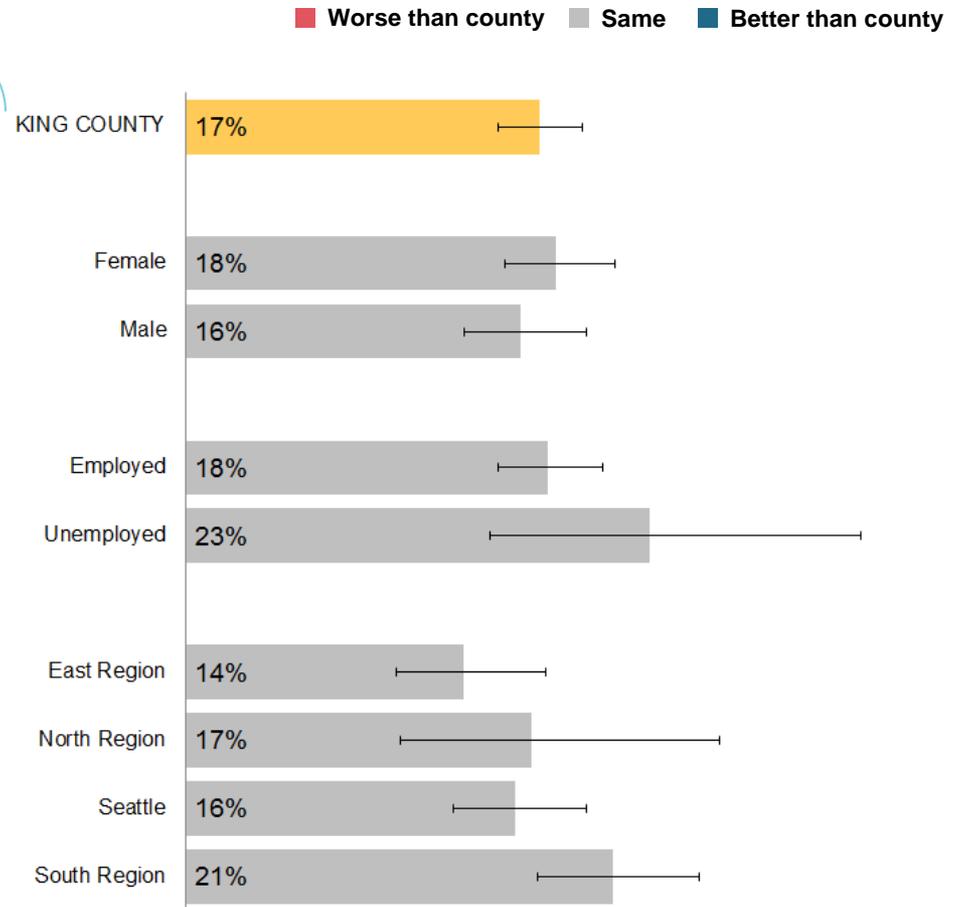
Adults with medical debt, King County, 2013

Medical bills are a common source of financial stress leading to bankruptcy and other woes. Through improving the affordability of health insurance coverage, the ACA aims to reduce the burden of medical debt.

This figure shows that 17% of adults experienced medical debt in 2013.

This could include medical bills being paid off with a credit card, through personal loans, or bill paying arrangements with hospitals or other providers. Such bills could also have originated prior to 2013.

Future years of data will allow additional demographic analysis.



Source: Behavioral Risk Factor Surveillance System

Cost of uncompensated hospital care, King County, 2010-2011 average

Uncompensated hospital care is the provision of health services for which hospitals are not reimbursed, typically because a patient does not have health insurance coverage.

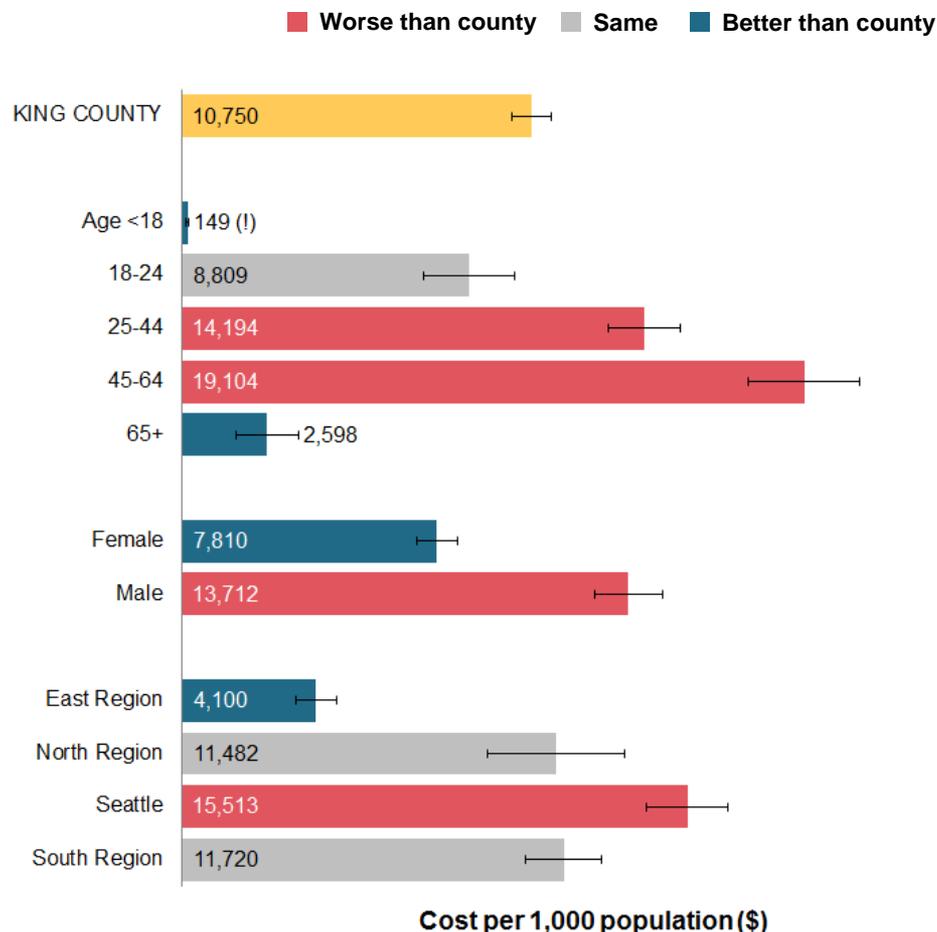
Analysis of pre-ACA data shows that between 2010 and 2011, King County hospitals provided about \$21 million of uncompensated care per year. This breaks down to roughly \$11 of uncompensated hospital care per King County resident per year.

Adults age 45-64 received about **128 times more** uncompensated care than children (age <18).

Men received **1.75 times more** uncompensated care than women, and Seattle residents received almost **4 times more** than residents of East Region.

The pattern of uncompensated care in King County will likely be substantially impacted by the ACA. Uncompensated hospital care has been in the [news](#) as of late, because hospital systems across the nation are seeing large reductions in uncompensated care due to the ACA.

Note: The amount of uncompensated outpatient and other non-hospital health care services in King County is unknown.



Source: Hospitalization Discharge Data, Washington State Department of Health, Office of Hospital and Patient Data

Utilization of care

Utilization of care represents the change in use of health care expected due to greater health insurance coverage and mandated essential health benefits.

Utilization of care is called out in Healthy People 2020 as the “health services” component of access to care.

To assess utilization of care, the Framework will be used to track the proportion of the population that uses various types of care, including primary care, dental care, and prenatal care services.

Adults with no routine medical checkup in the past year, King County, 2009-2013 average

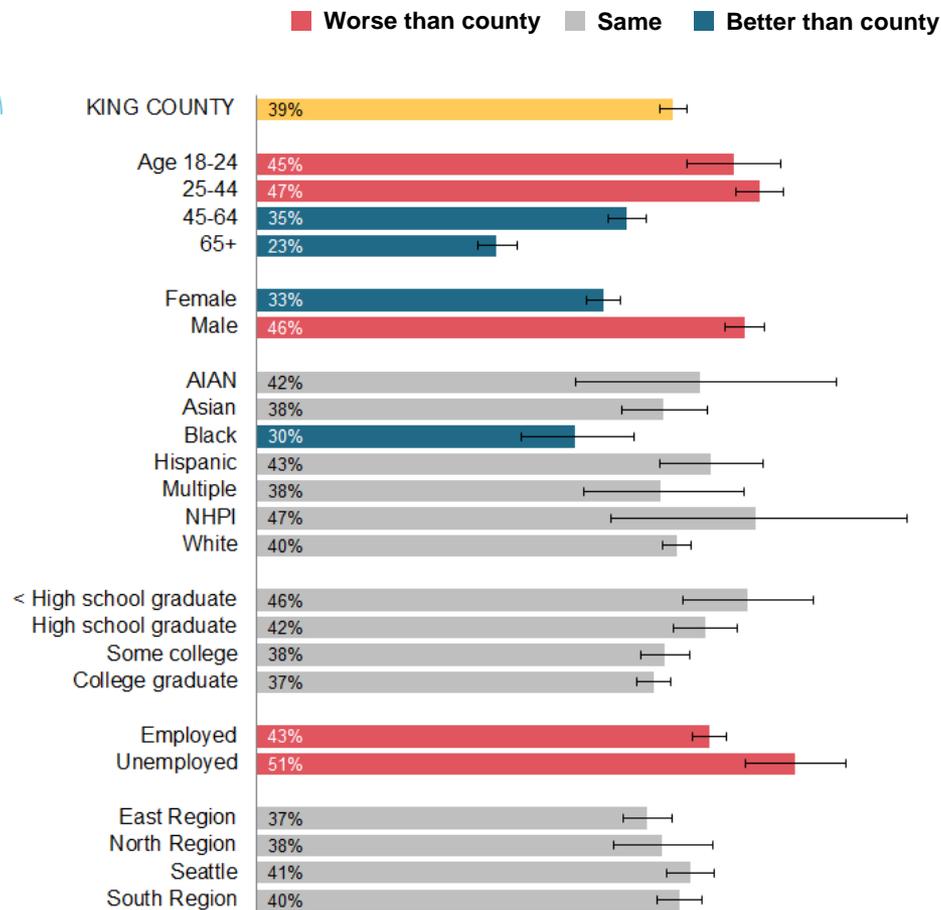
In 2009-2013, 39% of adults reported they had not seen a doctor for a routine checkup within the past year.

A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition. In other words, this is a measure of utilization of primary care.

Adults age 18-44 were **2 times more** likely to not have had a routine checkup than adults age 65 and over.

Men were **1.4 times more** likely than women, and unemployed adults were **2.3 times more** likely than retirees (data not shown) to have not had a routine checkup.

Note: It may seem strange that both employed and unemployed adults were less likely to have had a routine checkup than the average adult. This is because additional categories of employment are not shown in this graph, including homeworkers, students, retirees, and those who are unable to work. In particular, two of these groups – homeworkers and retirees – were significantly more likely to have had a routine checkup than the average adult.



Source: Behavioral Risk Factor Surveillance System

Adults with no dental checkup in the past year, King County, 2008-2012 average

Access to dental care is a critical concern that is often voiced by medically underserved individuals. Medicaid expansion in WA state introduced an adult dental benefit, but is unclear whether the dental system has the capacity to absorb new enrollees due in large part to relatively low Medicaid reimbursement rates for dental services.

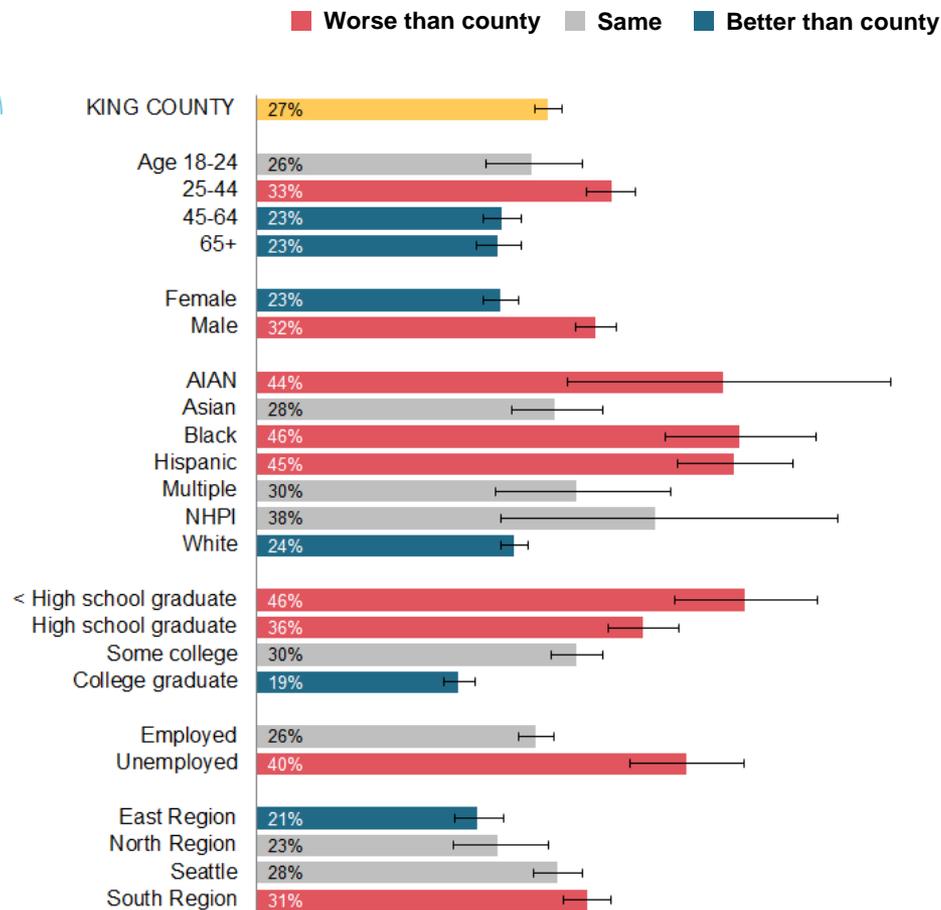
In 2008-2012, 27% of adults reported they did not visit a dentist or a dental clinic for any reason in the past year.

This includes visits to dental specialists, such as orthodontists.

American Indians/Alaska Natives, Blacks and Hispanics were almost **2 times more** likely to not have had a dental checkup than white adults.

Adults with less than a high school education and unemployed adults were **2.4 and 1.5 times more** likely to not have had a dental checkup than college graduates and employed adults, respectively.

Adults living in South Region were **1.5 times more** likely to not have had a checkup than adult residents of East Region.



Source: Behavioral Risk Factor Surveillance System

Births with inadequate prenatal care, King County, 2011

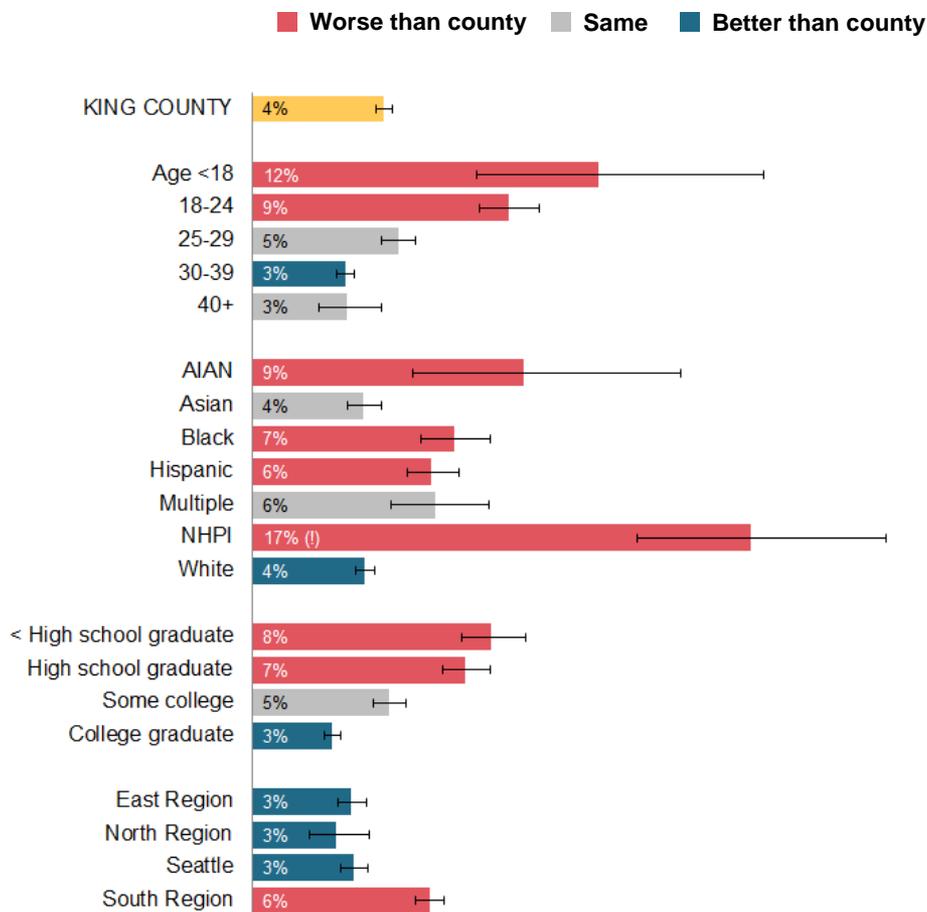
Starting prenatal care early in the pregnancy improves the chances of a healthy pregnancy. This indicator measures births for which mothers began prenatal care in the third trimester of pregnancy or received no prenatal care at all. Women who are pregnant have increased eligibility for Medicaid and additional services.

In 2011, 4% of births had inadequate prenatal care.

Mothers less than 18 years of age were **4 times more** likely to have had inadequate prenatal care than mothers age 40 and over.

Native Hawaiian/Pacific Islander mothers were over **4 times more** likely to have had inadequate care than Asian or white mothers.

Looking at education and place, mothers with less than a high school education and mothers living in South Region were **2.7 and 2 times more** likely to have had inadequate care than college graduates and mothers living in any of the other 3 regions, respectively.



Source: Birth Certificate Data, Washington State Department of Health, Center for Health Statistics

Preventable adult hospitalizations, King County, 2011

Prevention Quality Indicators (PQI) are a set of measures for adults to track potentially avoidable hospitalizations (i.e. Ambulatory Care Sensitive conditions). PQIs, which are defined by the Agency for Healthcare Research and Quality, are used to assess access to high quality, community-based primary care. Good outpatient care and early interventions can prevent the need for hospitalizations or prevent complications for these conditions.

The largest burden of preventable adult hospitalizations in King County is due to (in decreasing order) bacterial pneumonia, asthma and chronic obstructive pulmonary disease in older adults (age 40+), congestive heart failure, and diabetes (short and long-term complications).

Age is an important factor for preventable hospitalizations, with adults older than 75 being **7 times more** likely to be hospitalized for a preventable condition than the average King County adult (data not shown).

Note: COPD, chronic obstructive pulmonary disease; DM, diabetes mellitus; LE, lower extremity.

Angina	Asthma/COPD (older adult)		
Asthma (younger adult)	Asthma/COPD (older adult)		
Bacterial pneumonia		Congestive heart failure	Dehydration
DM long term complications	DM short term complications	High blood pressure	LE amputation
	DM uncontrolled	Urinary tract infection	

Preventable adult hospitalizations, King County, 2011

In addition to age, place also plays a role in determining risk for preventable hospitalizations.

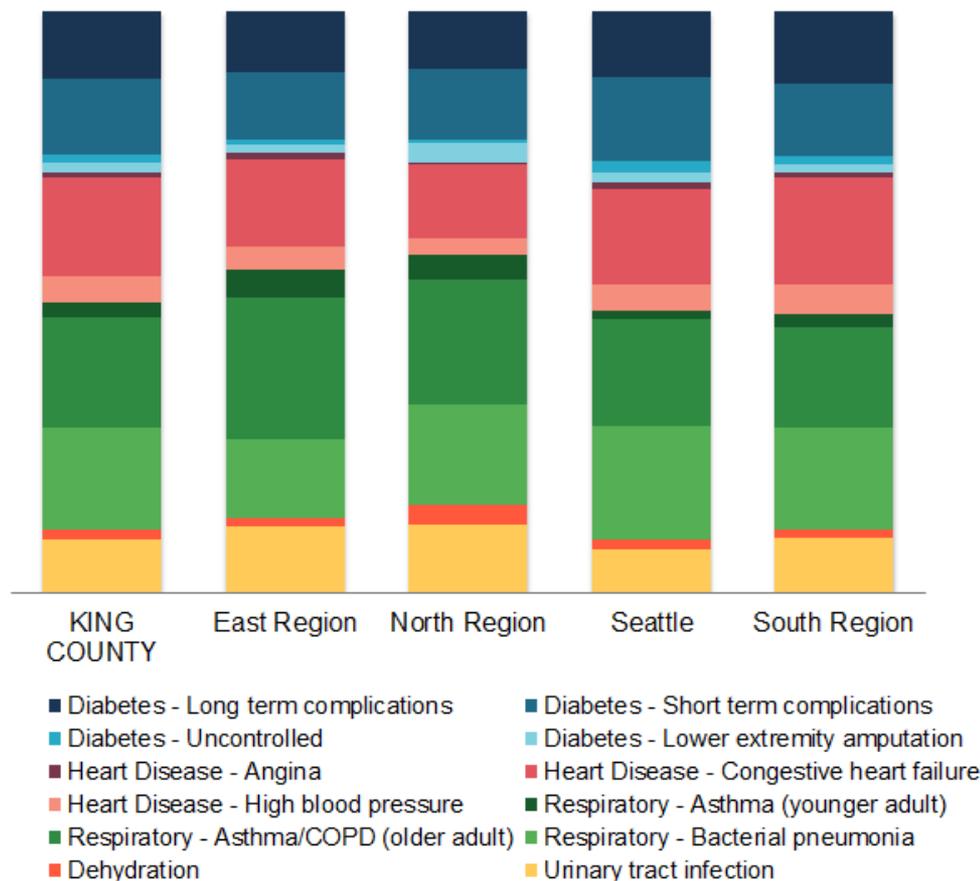
Looking at all PQIs across the board, adults living in South Region were **2.5 times more** likely to be hospitalized for a preventable condition than adults living in East Region.

Looking at the figure on the right, we can see that the causes of preventable hospitalization vary by region.

Generally, we see a greater emphasis on diabetes, heart disease, and young adult asthma in Seattle and South Region compared to East Region and North Region.

Diabetes and heart disease make up a substantial portion of the overall disease burden in Seattle and South Region (as well as for the county), and these findings reinforce the need for improved access to and utilization of clinical preventive services and chronic disease management in these areas of the county.

Note: COPD, chronic obstructive pulmonary disease.



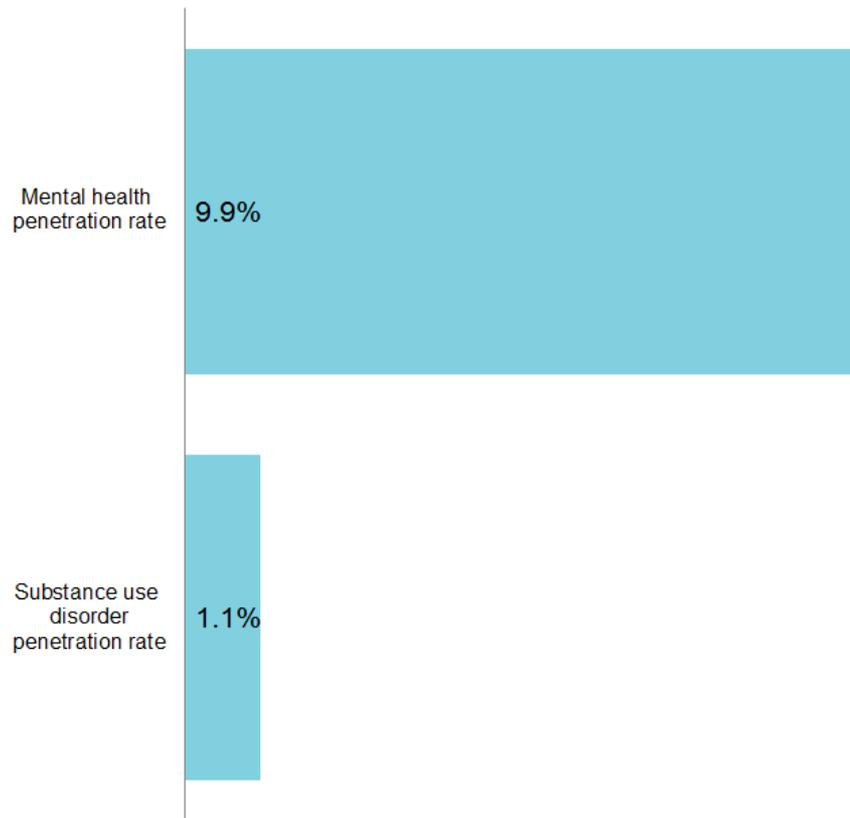
Medicaid clients receiving outpatient mental health and substance use treatment, King County, 2012-2013

The ACA, along with the [Federal Parity Law](#), has increased access to mental health care (MH) and substance use disorder (SUD) treatment. According to the Federal Parity Law, if health plans choose to provide coverage for behavioral health, that coverage must be at least as good as the coverage provided for physical health and surgery. In practice, the parity law is challenging to uphold for a variety of reasons, including a shortage of mental health and chemical dependency professionals.

While King County's MH/SUD services are currently provided separately, by 2016, the services will be provided under an integrated "behavioral health" administration.

All of this paints a hopeful picture for improving access to and utilization of mental health and substance use disorder services in King County. The figure on the right shows that between 7/2012 and 6/2013, about 10% and 1% of Medicaid clients received outpatient mental health and substance use disorder treatment, referred to as the penetration rate.

It's challenging to know what the ideal penetration rate would be because the denominator – the number of people in need of mental health and substance use disorder treatment – is difficult to define on the local level.



Source: King County Department of Community and Human Services, Mental Health, Chemical Abuse and Dependency

Quality of care

Quality of care represents improvements in evidence-based practices that lead to improved health outcomes and/or lower cost of care.

Quality of care is identified as a core evaluation area by numerous agencies, including the WHA (Community Checkup), the NCQA (HEDIS measures), and the AHRQ (Quality and patient safety).

To assess quality of care, PHSKC hopes to use the Framework to track the proportion of patients who receive evidence-based health care services.

The figure on the right does not exist because of a lack of access to routine sub-county data on quality of health care that contains rich demographic information.

In the near future, PHSKC hopes to access Medicaid claims data to assess quality of care disparities among Medicaid clients in King County. This would be similar to the work of the Washington Health Alliance in its [Disparities in Care Reports](#), but in greater detail for the sub-county context.

The ability of PHSKC to assess quality of care disparities for the overall King County insured population (i.e. including commercial health plans) will depend on the services made available through the WA State [All Payer Claims Database](#) (APCD) being developed by the WA State Office of Financial Management in partnership with the Washington Health Alliance.

Unable to access data
for this figure

Patient experience of care

Patient experience of care represents consumers' satisfaction with the health care they receive.

Patient experience is highlighted by the ACA, AHRQ (CAHPS measures), and the IHI (triple aim).

To assess patient experience of care, the Framework will be used to track the proportion of patients who are satisfied with the health care they receive.

Adults who are less satisfied with health care received, King County, 2013

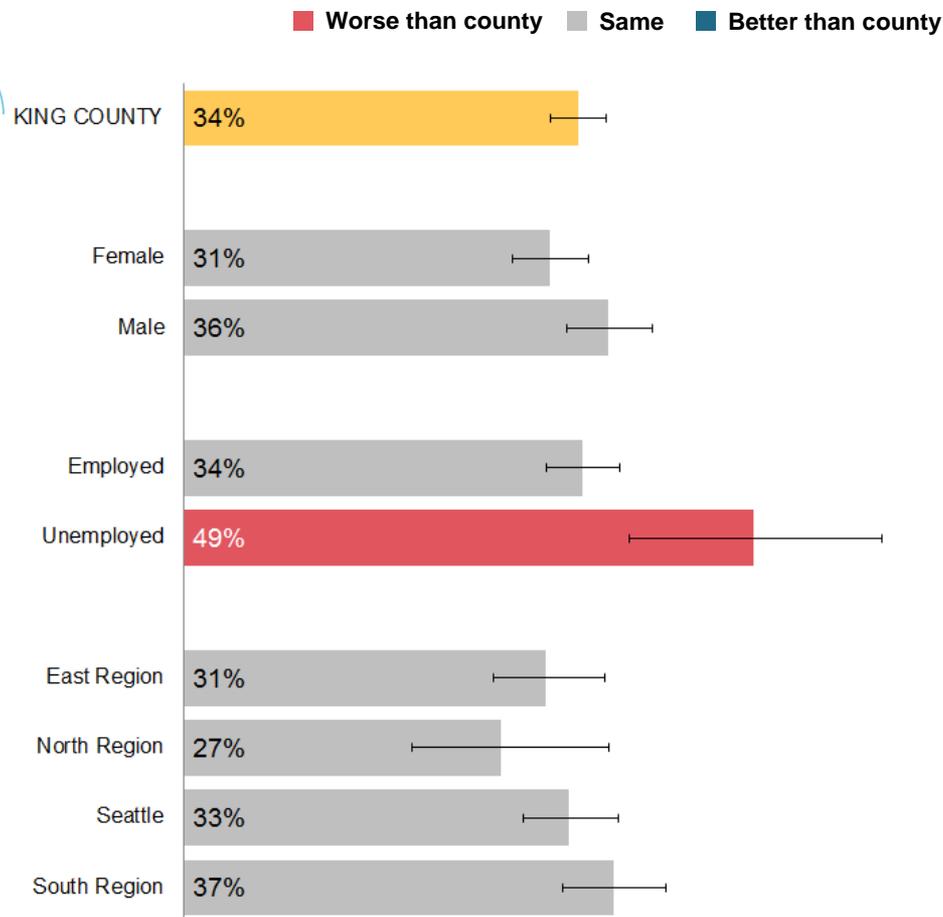
In 2013, 34% of adults were less satisfied (somewhat or not at all satisfied) with health care received.

Unemployed adults were **1.4 times more** likely to be less satisfied with their care than employed adults.

The current Framework has a lack of comprehensive patient experience due in large part to limited access to data sources.

The Washington Health Alliance has done some pioneering work collecting information on patient experience of health care through its [Your Voice Matters](#) surveys, but these data are not broken down by demographic characteristics within counties.

Another common source of patient experience data is Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys, which are administered by medical groups and health plans, and reported to the Health Care Authority for all Medicaid clients. In the future, PHSKC hopes to assess options for including CAHPS data in the Framework.



Source: Behavioral Risk Factor Surveillance System

Health system capacity

Health system capacity represents the ability of plans, plan networks, and providers to adequately and equitably meet demands for health care.

Health system capacity is included in Healthy People 2020 as a component of access to care, and is defined in WA state legislature and Medicaid contracts by OIC network adequacy regulations and HCA, respectively.

To assess system capacity, the Framework will be used to track primary care provider availability and appointment wait times for adult Medicaid beneficiaries.

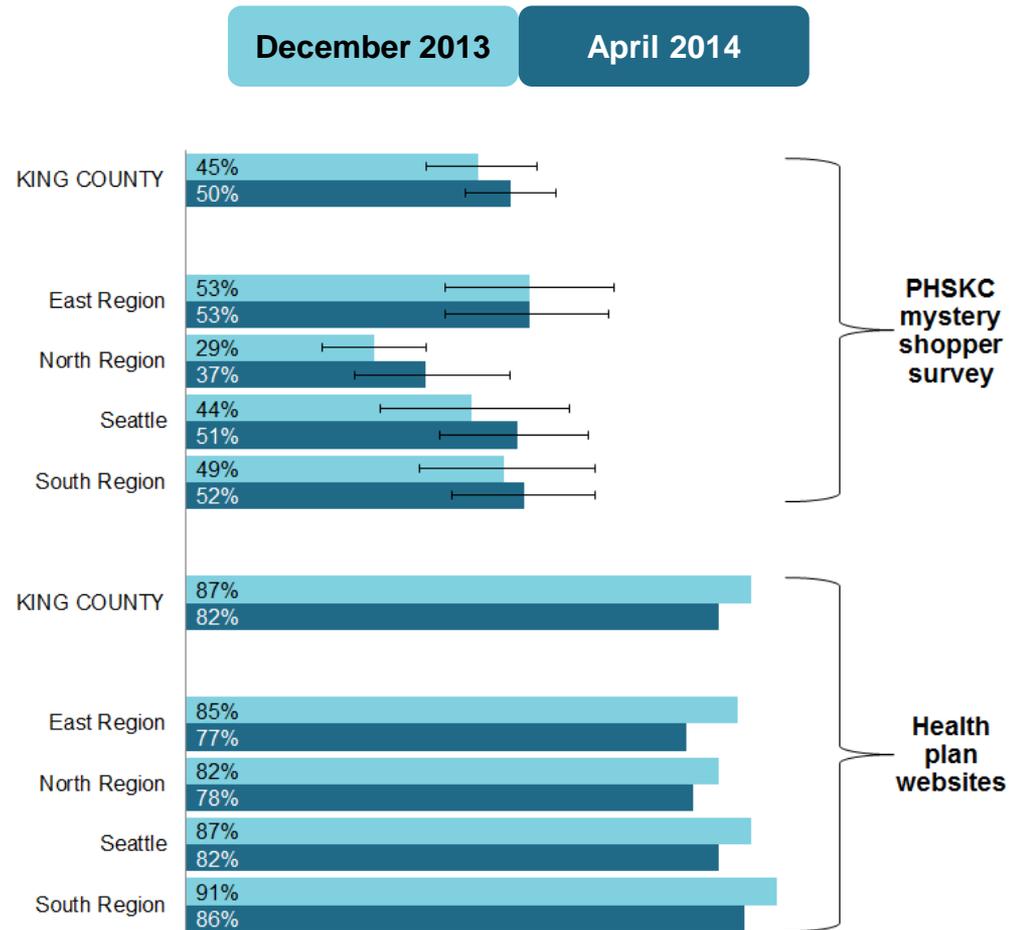
PCPs accepting adult Medicaid patients before and after Medicaid expansion – plan websites vs. PHSKC survey

Four months after Medicaid expanded on January 1, 2014, access to primary care did not change both for the county or its regions.

Both before and after Medicaid expansion, the online directories of managed Medicaid plans consistently over-advertised primary care capacity. These directories advertised **1.9 and 1.6 times greater** capacity than was found through a PHSKC survey in December 2013 and April 2014, respectively.

Though no impact on access to primary care was noted through the April survey, Medicaid enrollments continue to accrue daily and future access to care barriers remain a concern.

Regular monitoring of access to care among the safety net population will be crucial for assuring that health care is accessible and equitable. Pending availability of resources, PHSKC aims to repeat the mystery shopper survey.



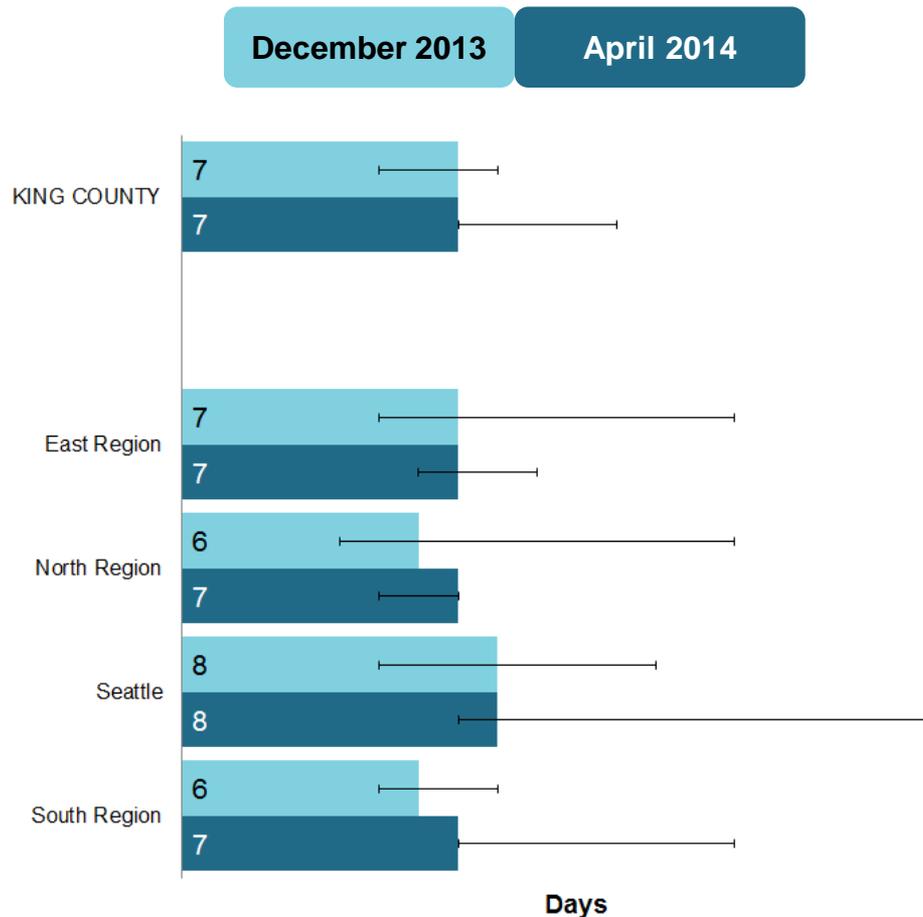
** Difference between December and April statistically significant, Adjusted Wald test, p-value <0.05
 Source: PHSKC mystery shopper survey of Medicaid Managed Care-contracted primary care providers

Median wait time for routine adult physical for Medicaid patients, by region, King County

We also saw minimal to no change in median wait times for an appointment for a routine adult physical among PCPs accepting new adult Medicaid patients.

The Apple Health contract requirement as stipulated by the Health Care Authority is 30 days for a non-urgent, non-symptomatic appointment. All of the wait times in this figure fall well within this range.

Median rather than average wait times are shown here because medians are not affected by extremes. In other words, a small number of providers with exceptionally long wait times would substantially increase the average wait time, but not the median wait time. In this case, the median wait time is most representative of what the average Medicaid patient would experience in King County.



** Difference between Dec and Apr significant, Hodges-Lehmann median difference, 95% CI does not include zero
 Source: PHSKC mystery shopper survey of Medicaid Managed Care-contracted primary care providers

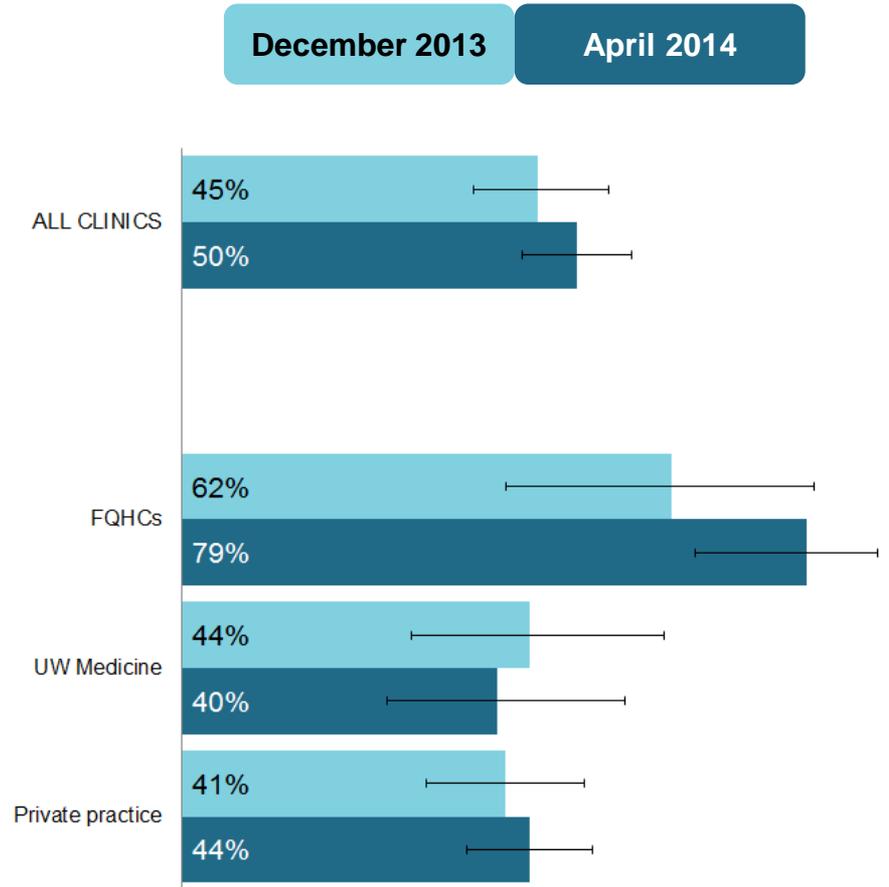
PCPs accepting adult Medicaid patients by clinic type, King County

In this figure, we have shown the percentage of PCPs accepting adult Medicaid patients by **clinic type** – Federally Qualified Health Centers (FQHC), the backbone of the primary care safety net; UW Medicine clinics (which are not FQHCs but do serve a large number of safety net clients); and private practice clinics.

We did not find a significant change in PCP availability or wait times (data not shown) between December and April for any clinic type.

However, one change we observed is that in April, the FQHC acceptance rate was **significantly higher** than UW Medicine and private practice, though this was not true in December. This could represent the considerable effort of FQHCs to expand clinics and services to meet the needs of the Medicaid expansion population.

Note: FQHCs include Public Health Centers, Community Health Centers (Country Doctor, Healthpoint, ICHS, Neighborcare, SeaMar, Seattle Indian Health Board), and tribal clinics. UW Medicine locations are defined [here](#). Private practice was defined as everything else by exclusion.



** Difference between December and April statistically significant, Adjusted Wald test, p-value <0.05
 Source: PHSKC mystery shopper survey of Medicaid Managed Care-contracted primary care providers
 FQHC, Federally Qualified Health Center; UW Medicine includes Valley Medical Center health system.

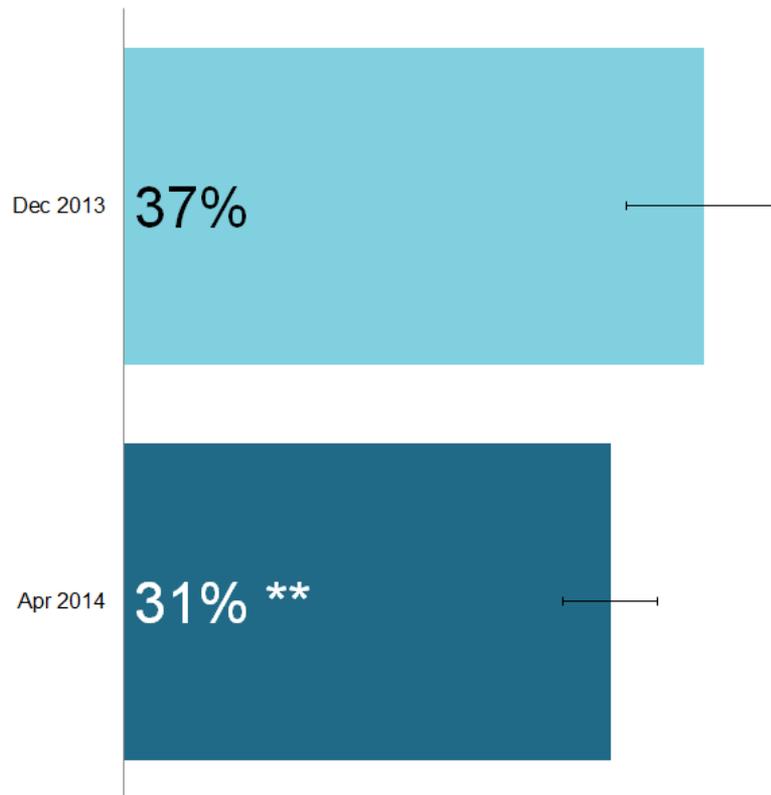
PCPs with an accurate phone number on MCO website directory, King County

PHSKC has heard from many stakeholder groups that the provider directories of MCOs are largely inaccurate. We also heard this about Medicare and commercial plan provider directories.

This anecdotal evidence was confirmed by our mystery shopper surveys. In December, only 37% of PCPs had an **accurate** phone number listed on an MCO website directory. By April, the accuracy rate had **fallen** significantly to 31%. The vast majority of inaccurate phone numbers were inaccurate for one of two reasons – the named provider was not at the clinic or the clinic did not offer primary care.

Inaccurate provider directories may not affect access to care, but they affect the usefulness of directories to consumers. The 2014 Apple Health contract between HCA and MCOs introduced a new QA requirement – MCOs must verify the contact information and availability of 25% of their network of primary care, pediatric and obstetric providers per quarter, and report to HCA twice per year.

Currently, the vast majority of Medicaid enrollees are **auto-assigned** a plan and PCP. This new QA requirement is intended to improve the accuracy of MCO provider directories to prepare for a change coming in 2015, whereby Medicaid clients will have to **elect** a plan while enrolling through Healthplanfinder.



** Difference between December and April statistically significant, Adjusted Wald test, p-value <0.05
Source: PHSKC mystery shopper survey of Medicaid Managed Care-contracted primary care providers

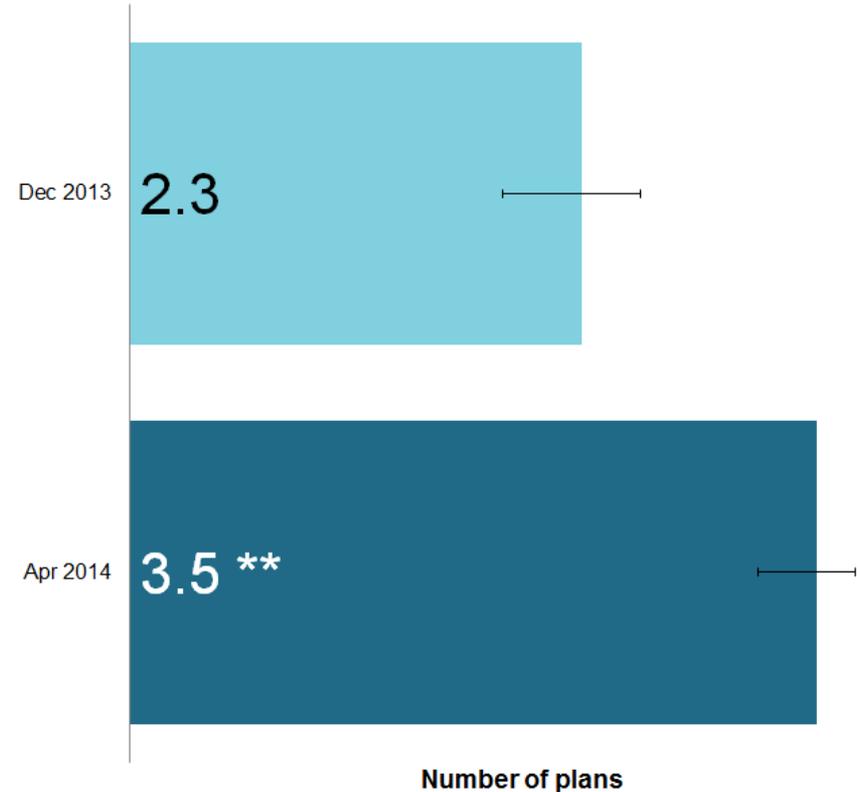
Average number of Medicaid plans accepted, among PCPs accepting managed Medicaid, King County

Here we see that among PCPs who accept any Medicaid plan, the average number of plans accepted increased significantly from **2.3** to **3.5** per provider, between December and April.

This could represent the effort of MCOs to expand their provider networks in preparation for Medicaid expansion and new marketplace plans.

However, an increased number of plans does not necessarily mean an increased number of Medicaid patients per provider. For example, a PCP may cap their Medicaid patient count at 10% of their total panel size, regardless of how many MCO plans they accept.

A large part of any increase in PCP availability to Medicaid clients is likely due to the temporary ACA-mandated reimbursement [rate increase](#) whereby PCPs can receive Medicare reimbursement rates for providing certain Medicaid services. PHSKC has heard many stakeholder groups voice concern over what will happen to PCP availability when this rate increase expires at the end of 2014.



** Difference between December and April statistically significant, Adjusted Wald test, p-value <0.05
Source: PHSKC mystery shopper survey of Medicaid Managed Care-contracted primary care providers

Cost of care

Cost of care represents the total per capita costs of health care and health plan premiums.

Reduced per capita cost of care is a fundamental goal of both the ACA and the IHI's triple aim.

To assess cost of care, PHSKC hopes to use the Framework to track cost of inpatient care (total population) and total cost of care (Medicaid population).

The figure on the right does not exist because of a lack of access to routine sub-county data on the cost of health care.

In the near future, PHSKC hopes to access Medicaid claims data to assess cost of care among Medicaid clients in King County.

As with quality of care, the ability of PHSKC to assess cost of care for the overall insured population will depend on the services made available through the WA State [All Payer Claims Database](#) (APCD).

Notably, current state legislation mandates that only Medicaid and Public Employee Benefits Board employee claims be submitted to the APCD, and allows all commercial plans to submit claims on a voluntary basis. Compared to the 10 other states in the nation with APCDs, WA state is behind the curve on this one. Claims data can and should be leveraged as a public good to ensure that health care is equitable, high-quality, and affordable.

Unable to access data
for this figure

Population health

Population health represents coverage of preventive services and population-level self-reported health status.

Improved population health is a long-term goal of the ACA, IHI's triple aim, and Healthy People 2020.

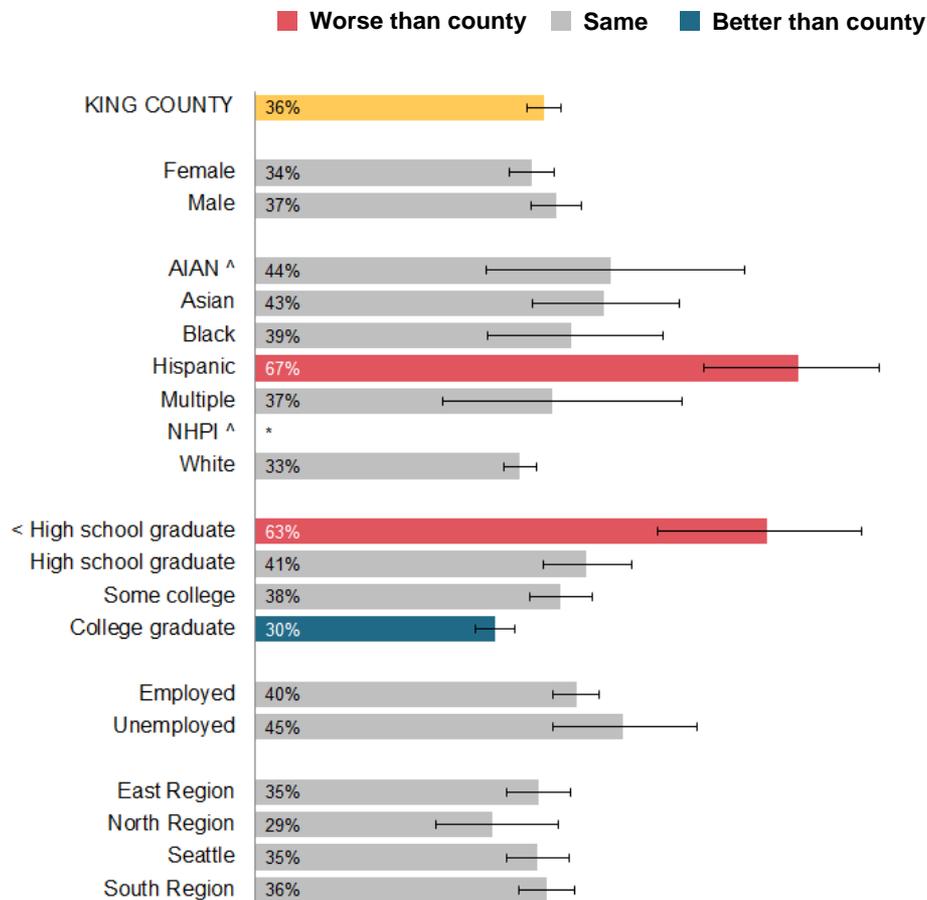
To assess population health, the Framework will be used to track coverage of clinical preventive services and self-reported health status, and the burden of behavioral health conditions.

Colorectal cancer screening guidelines not met, King County, 2011-2013 average

In 2011-2013, 36% of adults age 50-75 did not meet guidelines for colorectal cancer screening.

The greatest disparities are seen for Hispanics and adults with less than a high school education, who were **2 times more** likely to have not met guidelines than whites and college graduates, respectively.

Note: Screening guidelines defined as having had a Fecal Occult Blood Test (FOBT) within 1 year; a sigmoidoscopy within 5 years and a FOBT within 3 years; or a colonoscopy within 10 years.



Source: Behavioral Risk Factor Surveillance System

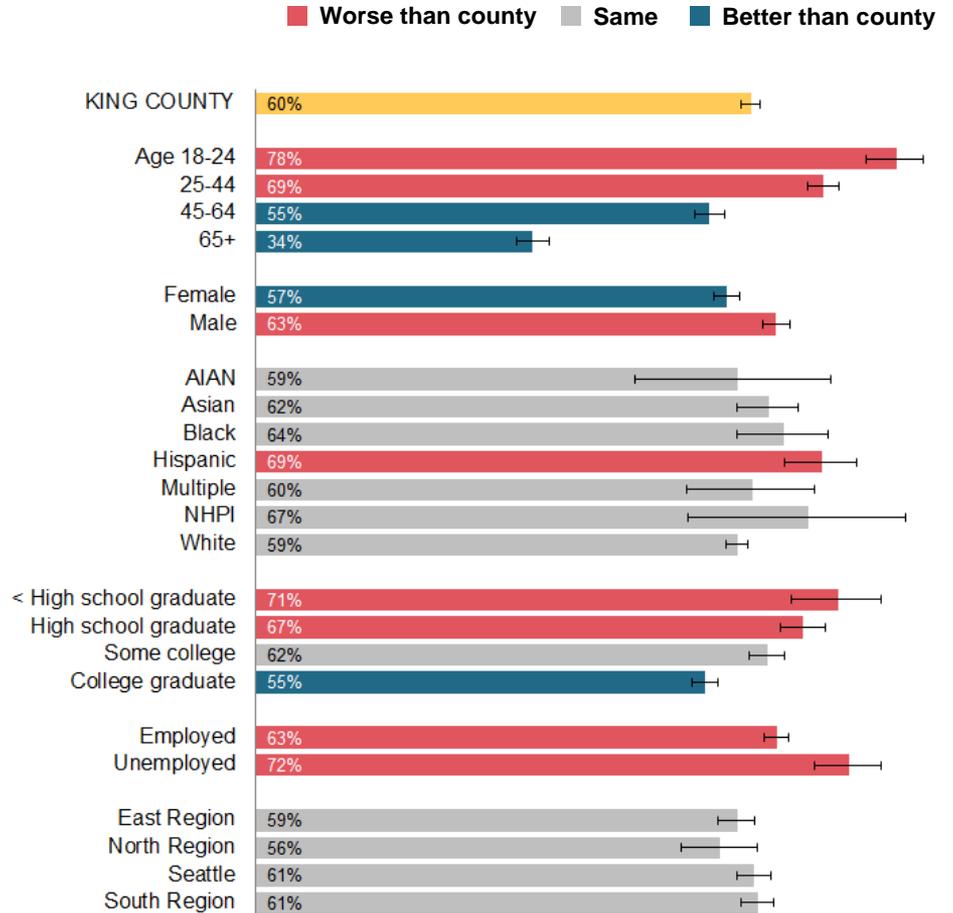
^ Race alone or in combination

Adults with no flu vaccination, King County, 2009-2013 average

In 2009-2013, 60% of adults did not receive a flu shot within the past year.

Adults age 18-24 were **2.3 times more** likely to have not received a flu shot than adults age 65 and older.

Adults with less than a high school education were **1.3 times more** likely than college graduates, and unemployed adults were **1.2 times more** likely than the average adult to have not received a flu shot, respectively.



Source: Behavioral Risk Factor Surveillance System

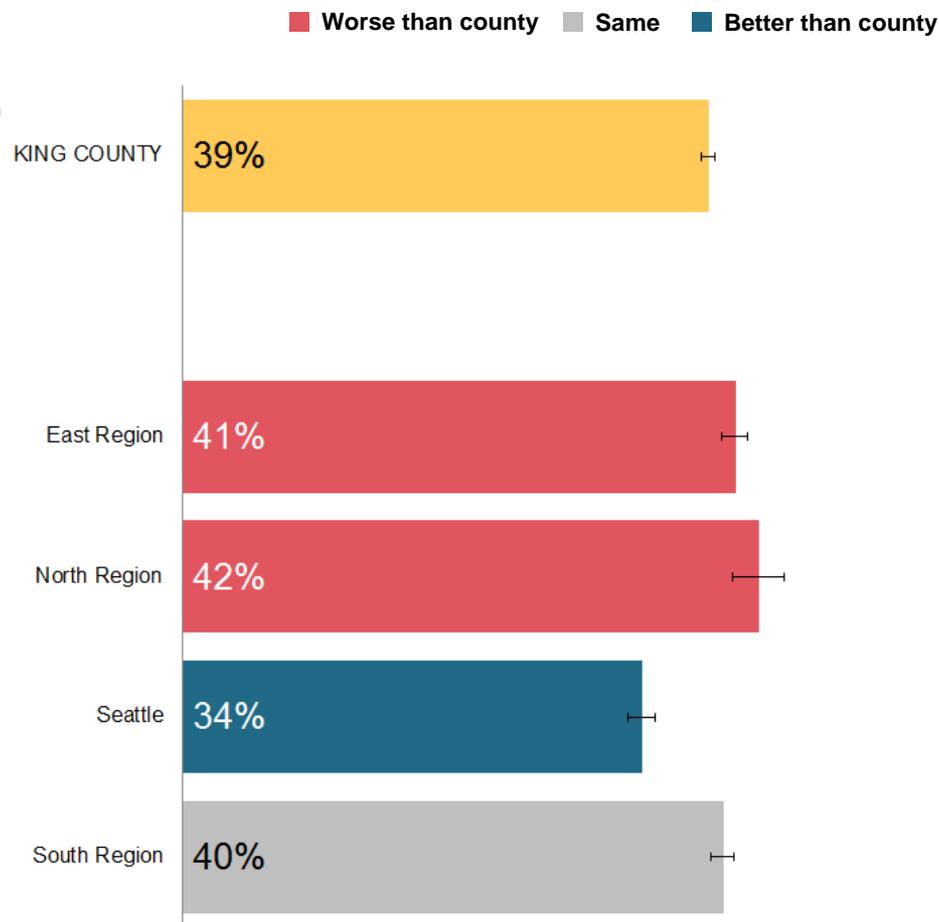
Children with incomplete vaccine series, age 19-35 months, King County, 2013

In 2013, 39% of children aged 19-35 months have incomplete vaccinations.

As child vaccinations are already reimbursed through programs like [Vaccines For Children](#), it is unclear whether the ACA will have impact. Potentially, improved access to primary care among families may in turn increase vaccination rates among children.

Childhood vaccination coverage shows a different geographic pattern than many other health indicators. Much of this report reveals that the South Region of King County experiences a disproportionate burden of poor health care outcomes. In the case of childhood vaccination, the higher-income regions of North and East have the lowest coverage rates, which may in part reflect a decreased willingness among parents, caretakers, and health care providers to support childhood vaccination in these areas.

Note: By childhood vaccine series, we are referring to the 4:3:1:3:3:1:4 series defined as 4 or more doses of diphtheria, tetanus, acellular pertussis (DTaP); 3 or more doses of polio vaccines; 1 measles containing vaccine; 3 or more doses of Haemophilus influenzae type b (Hib); 3 or more doses of hepatitis B (Hep B) vaccine; 1 or more doses of varicella vaccine; and 4 or more doses of pneumococcal conjugate vaccine (PCV).



Source: Washington State Immunization Information System

Adults reporting fair or poor health, King County, 2009-2013 average

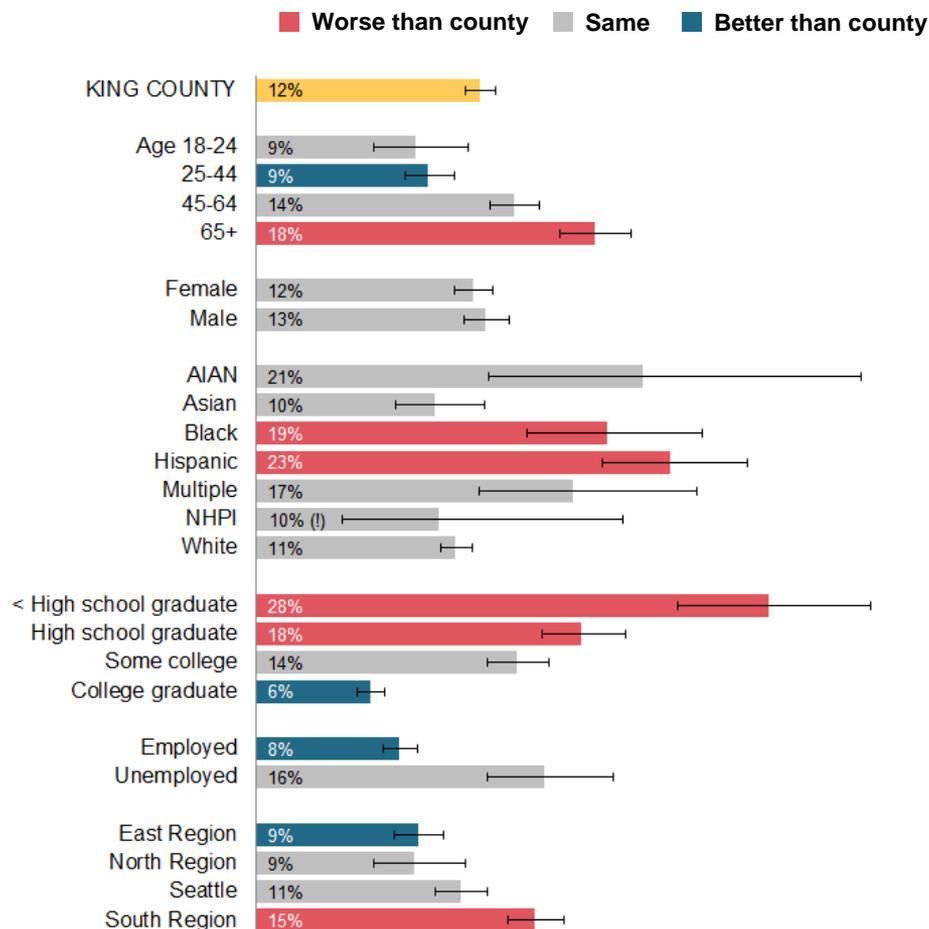
Self-reported health status reflects both an individual’s perception of their own condition, but also connects to experience of health care services.

In 2009-2013, 12% of adults reported their health was fair or poor.

Adults age 65 and over were **2 times more** likely to report fair or poor health status than adults age 18-24.

American Indians/Alaska Natives, Blacks, and Hispanics were about **twice** as likely to report fair or poor health status than Asians.

Adults with less than high school education were **4.7 times more** likely than college graduates, unemployed adults were **2 times more** likely than employed adults, and adults living in South Region were **1.7 times more** likely to report fair or poor health status than adults living in East and North Regions, respectively.



Source: Behavioral Risk Factor Surveillance System

Adults with serious psychological distress, King County, 2009-2013

The following pages show baseline health disparities for **behavioral health conditions**. It is unclear how the ACA will affect behavioral health, but some factors leading to improved behavioral health may include the [Federal Parity Law](#) and increased integration of physical and behavioral health services.

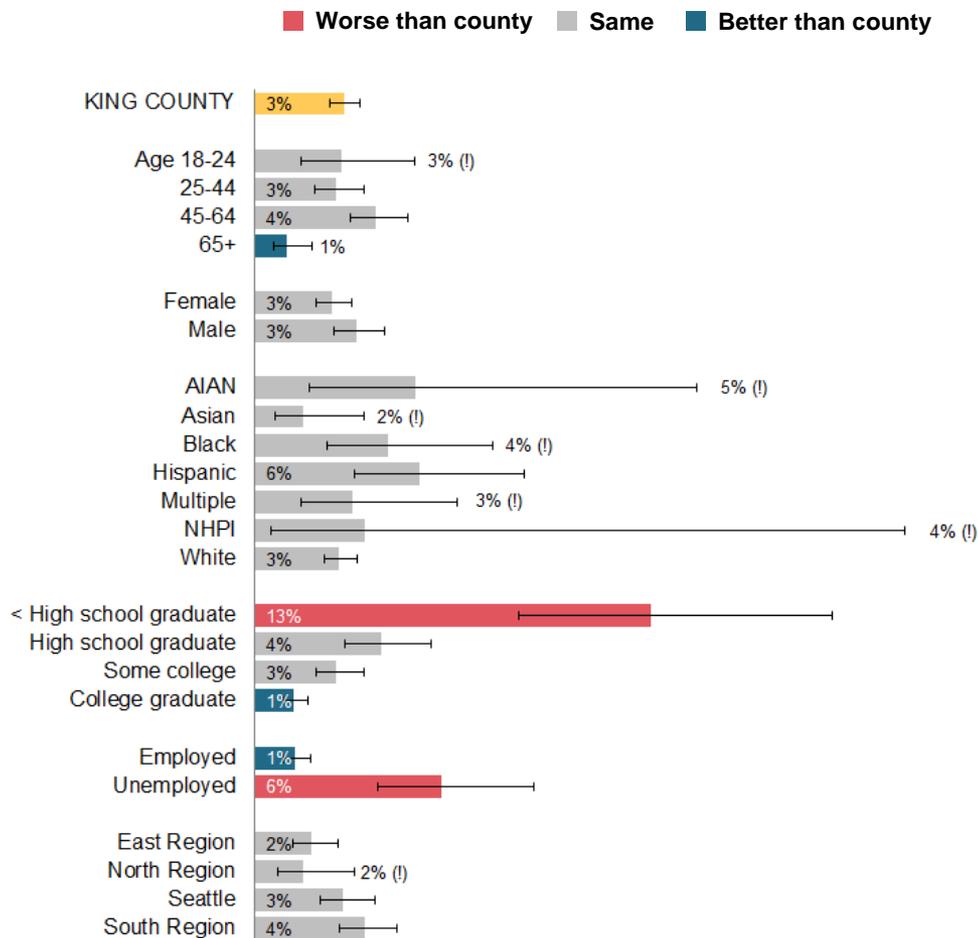
Serious psychological distress identifies individuals with mental health concerns severe enough to limit social, occupational, or school functioning and to require treatment.

Individuals displaying such symptoms (or symptoms of more severe mental illnesses such as schizophrenia or bipolar disorder) would likely be eligible for some of the mental health services that King County provides, if their income also falls below 200% of FPL.

In 2009-2013, 3% of adults reported serious psychological distress during the past 30 days.

Adults with less than a high school education were **13 times more** likely than college graduates, and unemployed adults were **6 times more** likely than employed adults to report serious psychological distress, respectively.

Note: Measured by the Kessler-6 scale: Subjects asked how often they felt nervous, hopeless, restless or fidgety, depressed, that everything was an effort, and/or worthless during the past 30 days. A score of 13 or more (out of a possible 24) signifies “serious psychological distress.”



Source: Behavioral Risk Factor Surveillance System

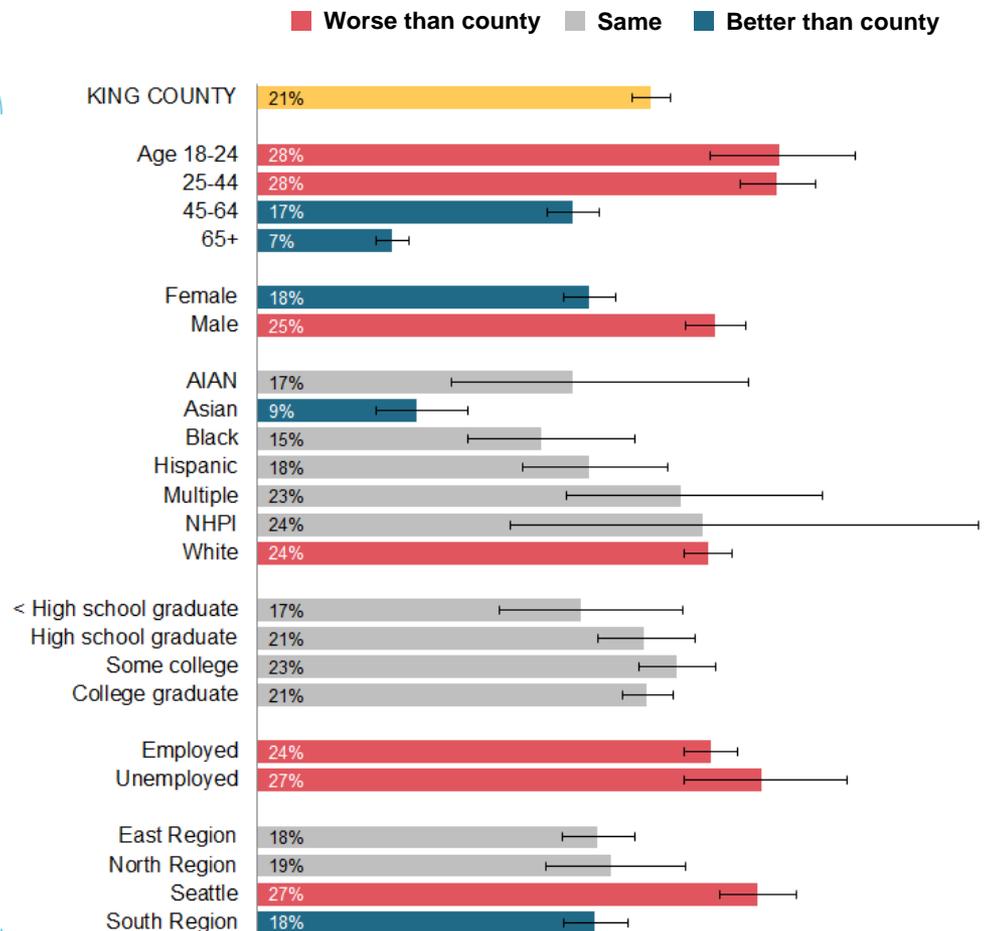
Adults who engage in excessive drinking, King County, 2009-2013 average

In 2009-2013, 21% of adults reported excessive drinking, defined as either binge drinking, heavy drinking or both in the past month.

Adults age 18-44 were **4 times more** likely than adults age 65 and over, men were **1.4 times more** likely than women, Native Hawaiians/Pacific Islanders and whites were **2.7 times more** likely than Asians, and residents of Seattle were **1.5 times more** likely than residents of all other regions to drink excessively, respectively.

Excessive drinking shows a different disparity pattern than serious psychological distress (Page 71). The latter increases substantially with decreasing education and unemployment, which is not seen for excessive drinking. Furthermore, whites and Seattle residents exhibit some of the highest rates of excessive drinking, which is not seen for serious psychological distress.

Note: Binge drinking is defined as consuming 4 or more drinks (women) or 5 or more drinks (men) on one single occasion in the past month. Heavy drinking is defined here as consuming more than 30 drinks in the past month (women) or more than 60 drinks in the past month (men).



Source: Behavioral Risk Factor Surveillance System

Non-fatal hospitalizations for behavioral health conditions, King County, 2012

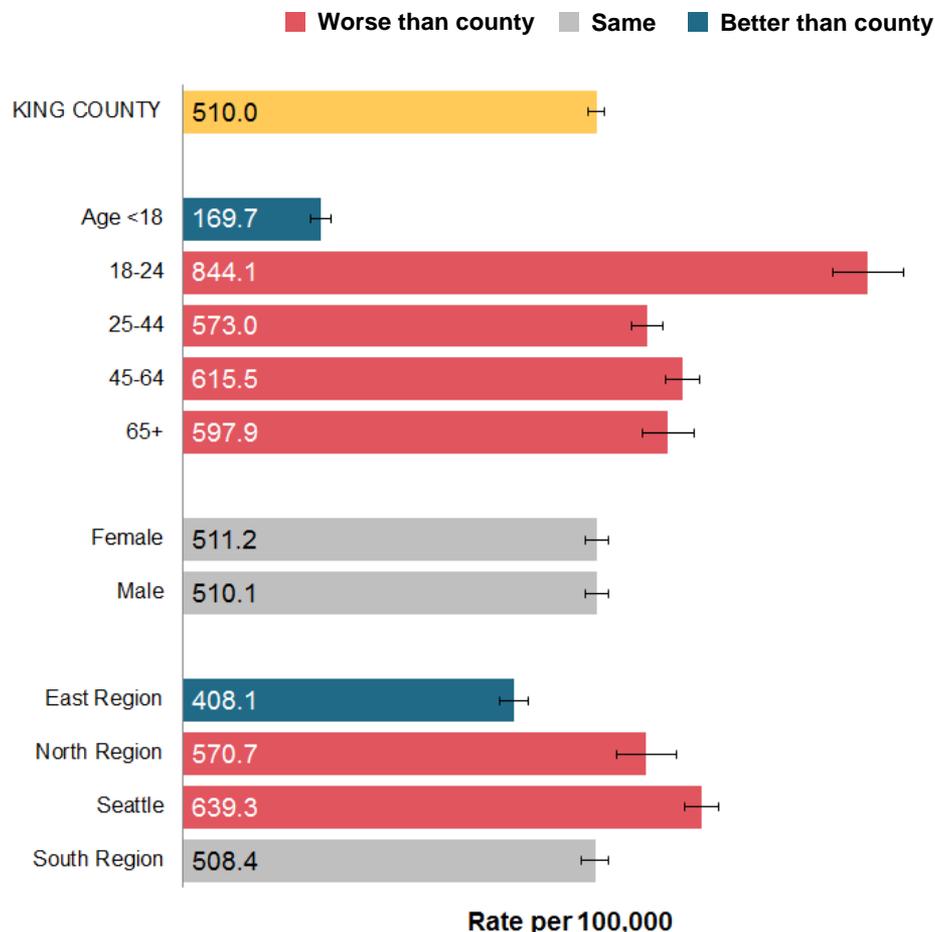
King County’s intervention programs are designed with the intention of avoiding the most serious outcomes that can result from behavioral health conditions– namely, hospitalizations and deaths. People may be hospitalized for drug overdoses or alcohol poisoning. People may also be hospitalized due to other self-harm.

In 2012, King County saw 510 non-fatal hospitalizations per 100,000 people for behavioral health conditions (age-adjusted).

The greatest disparities are seen for adults age 18-24, who were **5 times more** likely to have been hospitalized for a behavioral health condition than children (age <18).

Seattle residents were **1.6 times more** likely to be hospitalized than residents of East Region.

Note: Hospitalizations are categorized based on billing codes. Behavioral health includes all hospitalizations categorized as "mental illness" according to International Classification of Disease (ICD) guidelines. This includes specific mental illnesses, substance-related disorders, alcohol-related disorders, and self-harm hospitalizations.



Source: Hospitalization Discharge Data, Washington State Department of Health, Office of Hospital and Patient Data

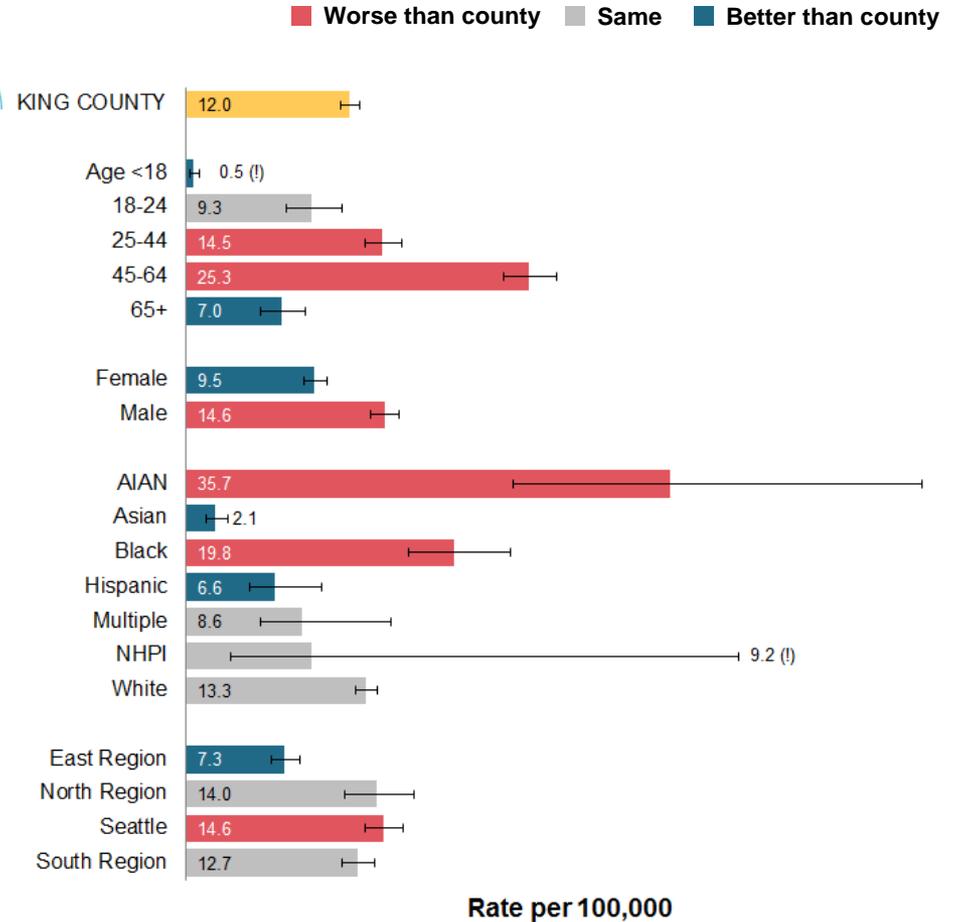
Drug-related deaths, King County, 2008-2012 average

In addition to hospitalization, death may also occur due to drug-related causes.

In 2008-2012, King County saw an average of 12 drug-related deaths per 100,000 people (age-adjusted).

Adults age 45-64 were **3.6 times more** likely to die from drug-related causes than adults age 65 and over.

Men were **1.5 times more** likely than women, American Indians/Alaska Natives were **17 times more** likely than Asians, and residents of Seattle and North Region were **2 times more** likely than residents of East Region to die from drug-related causes, respectively.



Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

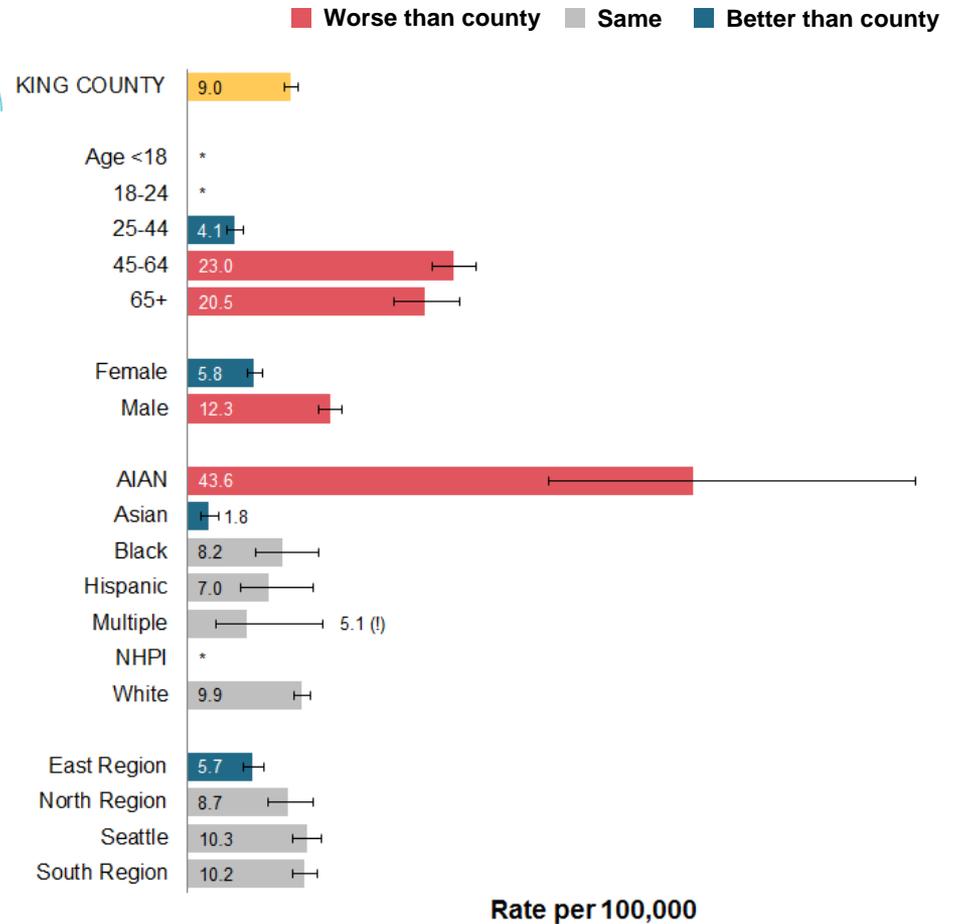
Alcohol-related deaths, King County, 2008-2012 average

In addition to hospitalization, death may also occur due to alcohol-related causes.

In 2008-2012, King County saw an average of 9 alcohol-related deaths per 100,000 people (age-adjusted).

Adults age 45-64 were **5.6 times more** likely to die from alcohol-related causes than adults age 24-44.

Men were **2 times more** likely as women, American Indians/Alaska Natives were **24 times more** likely as Asians, and residents of Seattle and South Region were **1.8 times more** likely as residents of East Region to die from alcohol-related causes, respectively.



Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

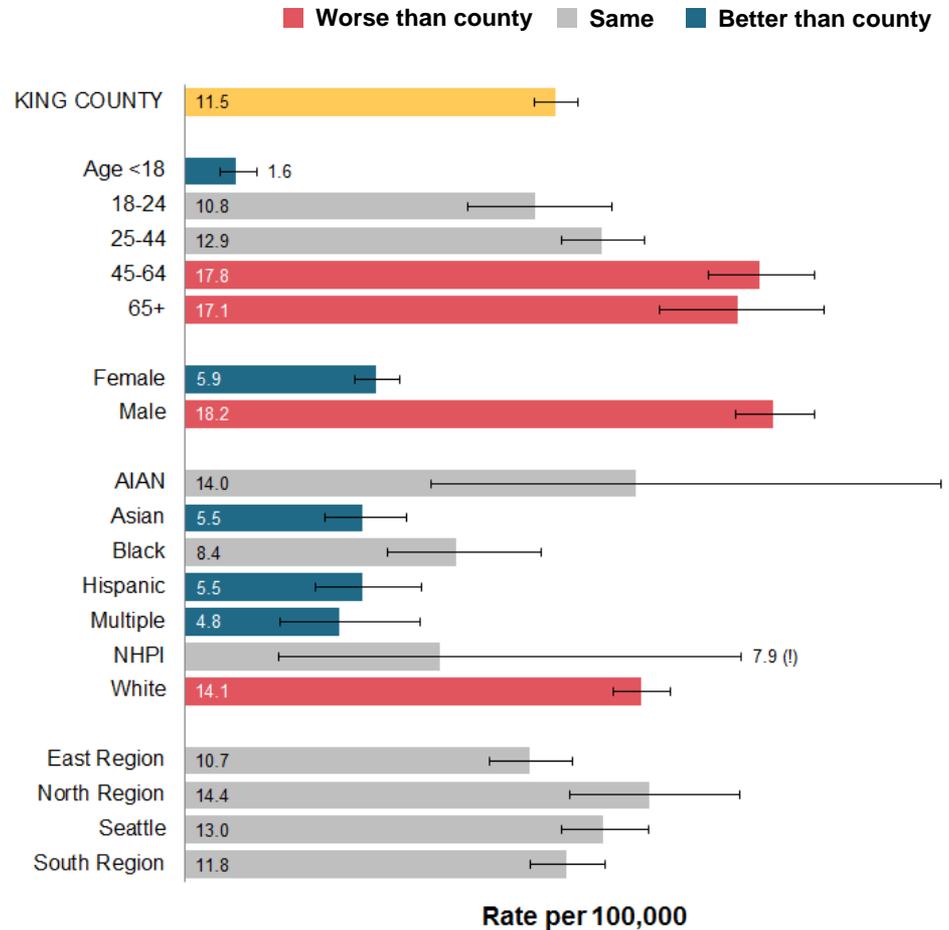
Suicides, King County, 2008-2012 average

Self-harm can sometimes also result in completed suicide.

In 2008-2012, King County saw an average of 11.5 suicides per 100,000 people (age-adjusted).

Adults age 45 and over were about **11 times more** likely to die from suicide than children (age <18).

Men were **3 times more** likely than women, and American Indians/Alaska Natives and whites were **2.6 times more** likely than Asians and Hispanics to die from suicide, respectively.



Source: Death Certificate Data, Washington State Department of Health, Center for Health Statistics

Unprecedented opportunities

When we look below the overall high levels of health in King County, we find that people of color, people living in poverty, and people living in communities with low opportunities experience worse health than the average resident. This pattern emerges in all 7 domains of the ACA QA & Evaluation Framework. New opportunities to address health disparities and inequity include the ACA, [Accountable Communities for Health](#), the [King County Health and Human Services Transformation Plan](#), and [Communities of Opportunity](#). By working across sectors through a shared commitment to prevention-focused, upstream interventions, King County aims to improve health and eliminate health disparities.



The successful completion of Washington Healthplanfinder's first open enrollment period and the launch of Medicaid expansion, led to enrolling almost 200,000 King County residents in new health insurance coverage. This remarkable achievement represents a new beginning for many individuals, as lack of affordable access to health care is a major barrier along the pathway to improved health and well-being. Rapid and equitable expansion of health insurance coverage has planted a seed in King County, which if nurtured, can grow into a society where all individuals can thrive in a community where race, place, and income have no bearing on an individual's chance of maximizing health and happiness.

As with any seed, insurance expansion is brimming with potential but needs support in order to be brought to fruition. In the coming years, PHSKC aims to evaluate the success of the ACA and insurance expansion in leading to increased access to care, improved utilization of health care services, reduced cost of care, improved population health, and minimized health disparities. Ensuring that the ACA lives up to its promise is a responsibility of PHSKC and all public health departments, stemming from the core assessment and assurance [functions](#) of public health.

Moving forward

Moving forward, PHSKC will continue to analyze pre- and post-ACA data, seek and acquire new data assets to support health reform evaluation, continue to forge and strengthen partnerships across sectors and agencies, and advocate for a unified approach to health reform evaluation in King County and Washington state. Though PHSKC will continue to assess the pressing issues of access to care and health system capacity, over time PHSKC will shift focus to utilization, quality, patient experience, and cost of care as intermediate outcomes of ACA implementation. Finally, population health outcomes will be continually measured, but are best viewed as long-term outcomes. Another key task for 2014 and beyond will be collaboration with the King County Department of Community and Human Services and other stakeholders to strengthen behavioral health and chemical dependency components of the Framework.

PHSKC will continue to produce, as resources allow, an annual written report to summarize findings, lessons learned and next steps, as well as intermediate reports to disseminate time-sensitive findings. All deliverables will be posted **online** and distributed electronically to key stakeholders including policymakers, public agencies, health plans, health care providers, community-based organizations, professional organizations, and researchers.

As our community moves forward into the post-ACA era, PHSKC plans to evaluate the longer-term impacts of the ACA, including the quality of health care services provided within its jurisdiction. This includes working across agencies, facilitating and convening stakeholders, breaking down traditional cross sector barriers in a commitment to public accountability and shared knowledge, and measuring progress towards eliminating health disparities and the triple aim of improved health, quality of care, and reduced costs.



Sources of images in report

- Cover page: [Hippocratic staff](#) and [scales of justice](#)
- Pages 2, 10, 11: [Stethoscope](#)
- Page 3: [Scales of justice](#)
- Page 31: [Blank sign](#)
- Page 78: [Road ahead](#)

- Notes:
 - All other images in the report were either derived from Microsoft Office or produced by PHSKC.*
 - All references to published articles, reports, and websites have been embedded in the report as hyperlinks.*

Technical information

Confidence Interval (also known as error bar) is the range of values that includes the true value 95% of the time. If the confidence intervals of two groups do not overlap, the difference between groups is considered statistically significant (meaning that chance or random variation is unlikely to explain the difference). For American Community Survey data, results are reported with a 90% confidence interval, showing the range that includes the true value 90% of the time.

Crude, Age-Specific, and Age-Adjusted Rates

- ❑ Rates are usually expressed as the number of events per 100,000 population per year. When this applies to the total population (all ages), the rate is called the crude rate.
- ❑ When the rate applies to a specific age group (e.g., age 15-24), it is called the age-specific rate.
- ❑ The crude and age-specific rates present the actual magnitude of an event within a population or age group.
- ❑ When comparing rates between populations, it is useful to calculate a rate that is not affected by differences in the age composition of the populations. This is the age-adjusted rate. For example, if a neighborhood with a high proportion of older people also has a higher-than-average death rate, it will be difficult to determine if that neighborhood's death rate is higher than average for residents of all ages or if it simply reflects the higher death rate that naturally occurs among older people. The age-adjusted rate mathematically removes the effect of the population's age distribution on the indicator. This report presents age-adjusted rates as the default, except where age-specific rates are presented.

Geographies: Whenever possible, indicators are reported for King County as a whole and for 4 regions within the county. If enough data are available for a valid analysis, they may also be reported by smaller geographic areas (Health Reporting Areas, ZIP codes). This report has purposefully excluded most maps as a website is currently being developed that will provide interactive maps for indicators by HRA and ZIP code wherever possible.

Health Reporting Areas (HRAs): In 2011, new King County [Health Reporting Areas](#) (HRAs) were created to coincide with city boundaries in King County. HRAs are based on aggregations of U.S. Census Bureau-defined blocks. Where possible, HRAs correspond to neighborhoods within large cities, and delineate unincorporated areas of King County. The new HRAs were designed to help cities and planners as they consider issues related to local health status or healthy policy.

Federal Poverty Guidelines, issued by the Department of Health and Human Services, are a simplified version of the federal poverty thresholds. The guidelines are used to determine financial eligibility for various federal, state, and local assistance programs. For a family of 4, the federal poverty guideline was \$22,050 in 2010; in 2013 it was \$23,550.

Race/Ethnicity and Discrimination: Race and ethnicity are markers for complex social, economic, and political factors that can influence community and individual health in important ways. Many communities of color have experienced social and economic discrimination and other forms of racism that can negatively affect the health and well-being of these communities. We continue to analyze and present data by race/ethnicity because we believe it is important to be aware of racial and ethnic group disparities in health, income, housing, food hardship, and other indicators.

Technical information

Race/Ethnicity Terms: Federal standards mandate that race and ethnicity (Hispanic origin) are distinct concepts requiring 2 separate questions when collecting data from an individual. "Hispanic origin" is meant to capture the heritage, nationality group, lineage, or country of birth of an individual (or his/her parents) before arriving in the United States. Persons of Hispanic ethnicity can be of any race. 2010 Census terms: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Not Hispanic or Latino, Native Hawaiian or Other Pacific Islander, Some Other Race, Two or More Races, white, and white alone (Not Hispanic or Latino). Persons of Hispanic ethnicity can be of any race and are included in other racial categories.

Some surveys collect race/ethnicity information using only one question on race. These terms are: American Indian/Alaska Native (AIAN), Asian, Black, Hispanic, Multiple Race (Multiple), Non-Hispanic, Native Hawaiian/Pacific Islander (NHPI), and white. These are the terms used in this report's figures.

In addition, to support dissemination of data for small subgroups, where data for single race categories would be suppressed, we try to report rates for alone or in combination race groups. Specifically, this has been done for AIAN alone or in combination and NHPI alone or in combination.

Statistical Significance: Differences between sub-population groups and the overall county are examined for each indicator. Unless otherwise noted, all differences mentioned in the text are statistically significant (unlikely to have occurred by chance).

The potential to detect differences and relationships (termed the statistical power of the analysis) is dependent in part on the number of events and size of the population, or, for surveys, the number of

respondents, or sample size. Differences that do not appear to be significant might reach significance with a large enough population or sample size.

ACA QA/Evaluation Framework – Guidance documentation and relevance for ACA goals

Topic area	Source of guidance	Indicator area	Source of guidance	Indicator	Source of guidance
Access to care	HP2020	Coverage	HP2020 (component of access)	<ul style="list-style-type: none"> • Uninsurance • Enrollments by Exchange plan 	HP2020 ¹ LHI (persons with medical insurance), KCHHC
				<ul style="list-style-type: none"> • Adults with unmet medical need, uninsured for the year • Reasons for forgone care 	HP2020 ¹ LHI (Reduce % of persons who are unable to obtain or delay in obtaining necessary care or delay in obtaining necessary medical care, dental care or prescription medicines), KCHHC
		Affordability	ACA	<ul style="list-style-type: none"> • Uncompensated hospital care • Medical debt • Average premium per capita 	IHI triple aim ² and ACA (reduce per capita cost of health care)
Utilization of care	HP2020 ("health services" component of access to care)	Percentage using any care	HP2020/AHRQ	<ul style="list-style-type: none"> • Number of total visits to health provider 	IHI triple aim ² (ED and hospital use)
				<ul style="list-style-type: none"> • Late (or no) prenatal care 	PHSKC Community Health Indicators ³ , HP2020 ⁴
				<ul style="list-style-type: none"> • Adults having routine checkup in past year 	HEDIS measure ⁵
				<ul style="list-style-type: none"> • Adults without dental care in past year 	HP2020 ⁴ (Reduce % of persons who are unable to obtain or delay in obtaining necessary dental care)
				<ul style="list-style-type: none"> • AHRQ Prevention Quality Indicators 	AHRQ Prevention Quality Indicators Overview ⁶
				<ul style="list-style-type: none"> • Medicaid population utilizing MH and CD treatment (penetration rate) 	State Health Care Innovation Plan (physical/behavioral health integration)

ACA QA/Evaluation Framework – Guidance documentation and relevance for ACA goals

Topic area	Source of guidance	Indicator area	Source of guidance	Indicator	Source of guidance
Quality of care	ACA, HP2020, HEDIS	Evidence-based practices	NCQA (HEDIS)	<ul style="list-style-type: none"> Though not included in Framework due to lack of access to claims data, HEDIS measures included in the WHA Community Checkup are all applicable 	HEDIS ⁵
Patient experience of care	ACA, component of quality (IOM, AHRQ), IHI triple aim	Satisfaction with health care received	AHRQ/ CAHPS, IHI triple aim	<ul style="list-style-type: none"> Reported satisfaction with health care received, adults 	CAHPS Indicator ⁷ , IHI triple aim ²
Health system capacity	HP2020 (component of access to care)	Health plan network adequacy	HP2020, OIC, HCA	<ul style="list-style-type: none"> Adult PCP-locations accepting new managed Medicaid patients 	HP2020 ⁴ (Increase # of practicing primary care MDs), OIC (network adequacy)
				<ul style="list-style-type: none"> Wait time (days) until new appointment for, adult PCP locations (MCO contracted) 	CAHPS Indicator ⁷ , IHI triple aim ²

ACA QA/Evaluation Framework – Guidance documentation and relevance for ACA goals

Topic area	Source of guidance	Indicator area	Source of guidance	Indicator	Source of guidance
Costs	ACA, IHI triple aim	Total costs of health care per capita	ACA, IHI triple aim	• Estimated cost of inpatient health care	IHI triple aim ²
Population health	ACA, HP2020, IHI triple aim	Preventive services	HP2020, AHRQ/USPSTF	<ul style="list-style-type: none"> • Mammography • Colorectal cancer screening • Cholesterol screening • Childhood immunization rate • Received flu vaccination 	PHSKC Community Health Indicators ³ , HEDIS ⁵ , HP2020 ¹ Leading Indicator, HEDIS ⁵ , PHSKC Community Health Indicators ³
		Health status	HP2020	• Reported fair/poor health status	PHSKC Community Health Indicators ³ , HP2020 ⁴ , IHI triple aim ²

AHRQ – Agency for Healthcare Research and Quality; CAHPS – Consumer Assessment of Healthcare Providers and Systems; HCA – Health Care Authority; HEDIS – Healthcare Effectiveness Data and Information Set; HP2020 – U.S. Healthy People 2020; IHI – Institute for Healthcare Improvement; IOM – Institute of Medicine; KCHHC – King County Hospitals for a Healthier Community; LHI – Leading Health Indicator; NCQA – National Committee on Quality Assurance; OIC – Office of the Insurance Commissioner; USPSTF – U.S. Preventive Services Task Force.

¹Healthy People 2020. (2013). Leading Health Indicators. Retrieved from <http://www.healthypeople.gov/2020/LHI/default.aspx>

²Institute for Healthcare Improvement. (2013) IHI triple aim Measures. Retrieved from <http://www.ihl.org/offerings/Initiatives/TripleAim/Pages/MeasuresResults.aspx>

³Public Health-Seattle & King County. (2013). Data and reports. Retrieved from <http://www.kingcounty.gov/healthservices/health/data.aspx>

⁴Healthy People 2020. (2013). Health Care Access. Retrieved from <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1>

⁵National Committee for Quality Assurance. (2013). HEDIS 2014. Retrieved from <http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures/HEDIS2014.aspx>

⁶Agency for Healthcare Research and Quality. Prevention Quality Indicators Overview. Retrieved from http://www.qualityindicators.ahrq.gov/modules/pqi_overview.aspx

⁷Agency for Healthcare Research and Quality. (2013). CAHPS: Surveys and Tools to Advance Patient-Centered Care. Retrieved from <https://cahps.ahrq.gov>

Stakeholder engagement, selected organizations

Stakeholder	Point of contact	Topics discussed
Amerigroup	Kim Russell, Vice President of Provider Relations	PHSKC has discussed the mystery shopper survey findings with Kim and other Amerigroup staff members.
Center for Health Workforce Studies	Sue Skillman, Deputy Director	Although a 2011/2012 CHWS-OFM study provided information on WA state (and King County) clinical workforce demographics, there are no plans to collect new data in future years. With regards to a high-quality sampling frame for MDs and PAs, Sue was interested in learning more about the WSMA MD/PA database.
Center for Medicare and Medicaid Services	Zabeen Chong, Vani Annadata	Due to inaccuracy of the data for key variables (e.g. address), the National Plan and Provider Enumeration System is not a reliable sole source for census/ active monitoring of health care providers.
Community Health Centers	Leadership from Seattle Indian Health Board, Country Doctor, Neighborcare, Healthpoint, and International Community Health Services	Presented preliminary findings of mystery shopper survey of access to care among managed Medicaid-contracted primary care providers in King County.
Community Health Plan of WA	RoJean Backman, Network Management Division Abie Castillo, VP of Network Management	Internal real-time monitoring of network capacity includes monthly GeoAccess reports, member complaints, provider notifications of changes in panel status, annual provider wait time surveys, recredentialing every 3 years, and annual evaluation for HCA and NCQA. Additionally, PHSKC has discussed the mystery shopper survey findings with Abie and other CHPW staff members.
Community Health Services Division, PHSKC	Travis Erickson, Managed Care Manager	Introduction to Apple Health contract between HCA and MCOs. Travis has also been part of the conversation with HCA around the new network capacity QA requirement and the PHSKC mystery shopper surveys of access to care in King County.
Coordinated Care	Charles Levine, VP of Network Development & Contracting	PHSKC has discussed the mystery shopper survey findings with Chuck and the Coordinated Care Medical Director Shawn West.
Group Health	Linda Proett, Director, Provider Services and Provider Communications	Existing clinic and hospital network is strong. Expanding networks only with a few Community Health Centers to meet some exchange plans' needs for those with existing care (e.g. Molina). There is extensive internal monitoring for internal providers beyond OIC requirements (hours of operation, PCP ratios, appointment waiting times, panel open status).

Stakeholder engagement, selected organizations

Stakeholder	Point of contact	Topics discussed
Harborview Medical Center Board	Elise Chayet, Associate Administrator, Clinical Support Services and Planning	Presented PHSKC ACA QA/Evaluation Framework and mystery shopper survey findings.
Healthy Washington Coalition	Sylvia Gil, Senior Public Policy Analyst (CHPW); Dekker Dirksen, Senior Public Policy Analyst (CHPW); Sybill Hyppolite (Healthcare Policy Specialist, 1199NW); Teresa Mosqueda (Government Affairs Officer, Washington State Labor Council)	PHSKC has attended regular meetings of the HWC Data Coordination work group. Topics discussed have included the King County ACA QA and Evaluation Framework, other frameworks, data from the Exchange, churn data, performance measures, and how to promote synergy among health reform evaluation efforts in WA state.
IMS Health	Brad Fawcett, Regional Sales Manager	IMS Health maintains updated census records of providers and addresses in King County, but accessing data appears to be cost-prohibitive.
Jail Health Services Division, PHSKC	Bette Pine, JHS Manager	Discussed potential relationship between insurance uptake, utilization of MH/CD services and recidivism rate in King County. Will continue to keep each other informed of ongoing evaluation activities.
King County Hospitals for a Healthier Community	Eva Wong, Epidemiologist, PHSKC	Presented PHSKC ACA QA/Evaluation Framework and mystery shopper survey findings.
Manatt Health Solutions	Karen Merrikin, State Health Care Innovation Plan Contracted Project Director (HCA)	Manatt is doing work in the context of the larger state innovation model by conducting a review of Washington's current capacity for integrated physical and behavioral health service delivery. They found no integration and limited coordination across physical health, mental health and chemical dependency systems.
Mental Health, Chemical Abuse and Dependency Services Division, King County Department of Community and Human Services	Laurie Sylla, Program Manager, System Performance Evaluation	Identified mental health and chemical dependency (MH/CD) indicators for the Medicaid population in King County using MHCADSD administrative data and additional sources. In the future, will help to extend Framework to include additional MH/CD indicators.

Stakeholder engagement, selected organizations

Stakeholder	Point of contact	Topics discussed
Office of the Governor	Bob Crittenden, Senior Health Policy Advisor	Discussed WA state and King County frameworks for QA and evaluation of ACA, need for access to detailed enrollment data, and opportunities for increasing synergy amount reform evaluation efforts in WA state.
Office of the Insurance Commissioner	Molly Nollette, Deputy Insurance Commissioner, Rates and Forms Division	Monthly data sharing agreement for Provider Network Form A is possible, which includes information about health care providers (e.g. specialty, panel restrictions, address) for all commercial plans in WA state. Data sharing agreements with the OIC will need to be finalized before data can be obtained. Annual enrollment data by health plan/county/gender are available on March 31 of the following year, and reports are available online. As data do not include provider availability, it is unclear how these data can be used to support QA and evaluation of the ACA.
Premera	Rich Maturi, SVP Health Care Delivery Systems	Believes there will be access issues for Medicaid and Medicare Advantage patients due to lower rates than HBE plans. Provider network adequacy is reassessed after network termination, not real time. Internal analysis focuses heavily on PCP and specialty physician availability within geographic areas as well as network access to unique services.
Regence	Beth Johnson, Health Care Delivery Systems	Regence was not planning on expanding its network prior to January 1, 2014, and stood ready to absorb any increase in patient volume. Network issues are mainly related to rural ED use. There is concern that providers who additionally serve Medicaid patients may be overly burdened by Medicaid expansion. No active monitoring of adequacy outside of OIC requirements and responding to consumer comments/complaints.
UnitedHealthcare	Deb McQuade-Van Hook	PHSKC has discussed the mystery shopper survey findings with Deb and other United staff members.
WA Health Alliance	Mary McWilliams, former Executive Director; Mark Pregler, Director, Performance Measurement	Use of Community Checkup data will require DSAs with each individual data provider. Given this, it will be more efficient to use the future all payer claims database.
WA Health Benefit Exchange	Richard Onizuka, Chief Executive Officer; Brad Finnegan, Director of Operations; Seema Gupta, Data and Reporting Manager	Individual-level, de-identified data likely has not been shared with any entity (to the best of our knowledge). PHSKC submitted a joint data request (with 4 other counties) in November 2013. Little progress has been made.

Stakeholder engagement, selected organizations

Stakeholder	Point of contact	Topics discussed
WA Health Care Authority	Barb Lantz, Manager, Quality and Care Management; Mike Barabe, ProviderOne Technical Manager	Discussed mystery shopper survey findings with Barb and others, new MCO network capacity QA contract requirement, and next steps for greater collaboration between PHSKC and MCOs. PHSKC is working with Mike Barabe on a ProviderOne claims data sharing agreement.
WA State Medical Association	Bob Perna, Director, Health Care Economics & Practice Support	WSMA has not worked extensively with OIC on monitoring physician/clinician capacity. They do maintain an extensive provider database (using Department of Health licensure data) that could inform monitoring efforts. Approval for mystery shopper survey use granted by WSMA Executive Committee.
WA State Department of Social and Health Services	David Mancuso, Director, Research and Data Analysis Division	Discussed potential use of PRISM data to inform health reform evaluation.
WA State Hospital Association	Claudia Sanders, Senior Vice President, Policy Development; Barbara Gorham, Policy Director, Access	Discussed OIC's new network adequacy standards for health carriers, as well as the results of the baseline PHSKC mystery shopper survey of access to care among managed Medicaid-contracted primary care providers. Expressed interest in being part of any discussion on how to unify health reform evaluation efforts in WA state.
WA State Office of Financial Management	Thea Mounts, Senior Forecasting and Research Coordinator	PHSKC has met monthly with Thea and her team to discuss agency progress towards health reform evaluation and opportunities for collaboration. Specific topics have included the All Payer Claims Database, mystery shopper survey of access to care, OIC network data, and next steps to promote synergy among health reform evaluation efforts in WA state.

Data sources considered, but not used

Data source	Reason for consideration	Reason for exclusion
National Plan and Provider Enumeration System	Free, publically available sources of data on supply of health care providers	Data is self-reported. NPIs and names are more accurate; other information is not updated and is not reliable as a sole source for research, administrative, or policy needs. There are no short-term (1-2 year) plans for data improvement; longer-term solutions are in development, although likely not to include mandate or enforcement means. The primary use of the database is to validate NPI enrollment, not to serve as census or source of valid address information.
IMS Health	Validated census of providers in King County	Cost-prohibitive.
Medical Expenditure Panel Survey	Nation-wide, nationally representative, validated data on medical costs	County-level, subgroup estimates unreliable.
National Health Interview Survey	Nation-wide, nationally representative, access to care and insurance coverage by sub-racial/ethnic groups	County-level, subgroup estimates unreliable.
Current Population Survey	State-level affordability of care and insurance premiums by sub-racial/ethnic groups; limited information on health care cost	County-level, subgroup estimates unreliable.

ACA QA/Evaluation Framework – Indicator matrix

Topic area	Indicator area	Indicator	Data source	Address equity	Comparison available	Periodicity	Lag in data	Expected direction of change	General QA/Evaluation question
Access to care	Coverage	Adults age 18-64 with no current health insurance	ACS	Place, race, age, sex, SES	County, state, nation	Annual	9-12 mo	↓	Has health insurance coverage increased?
		Adults age 18-64 uninsured at some point in past year	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Adults age 18-64 uninsured for a year or more	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Number enrolled in Medicaid or QHPs	HBE	Place, race, age, sex, SES	County, state, nation	?	?	↑	
		Children (age <18) with no health insurance	ACS	Place, race, age, sex, SES	County, state, nation	Annual	9-12 mo	↓	Are adults accessing appropriate health care services?
		Adults with unmet medical need due to cost	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Non-cost-related reasons for adults delaying care	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	N/A	

ACA QA/Evaluation Framework – Indicator matrix

Topic area	Indicator area	Indicator	Data source	Address equity	Comparison available	Periodicity	Lag in data	Expected direction of change	General QA/Evaluation question
Access to care	Affordability	Uncompensated hospital care	CHARS	Place, age, area SES	County, state	Annual	1 yr	↓	Has the total number of residents who receive care beyond their means to pay decreased?
		Adults with medical debt	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Average total premium per capita	HBE	Place, race, age, sex, SES	County, state	?	?	?	Have insurance premiums become more affordable to residents?
		Average net annual premium per capita (after employer contributions and tax credits)	HBE	Place, race, age, sex, SES	County, state	?	?	?	
Utilization	Percent using any care	Inadequate prenatal care	Birth records	Place, race, age, sex, SES	County, state, nation	Annual	9 mo	↓	Is a higher proportion of residents accessing clinical preventive services?
		Adults with no routine checkup in past year	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Adults with no dental visit in past year	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		AHRQ Prevention Quality Indicators (15)	CHARS	Place, age, area SES	County, state	Annual	1 yr	↓	Have hospitals reduced preventable admissions?

ACA QA/Evaluation Framework – Indicator matrix

Topic area	Indicator area	Indicator	Data source	Address equity	Comparison available	Periodicity	Lag in data	Expected direction of change	General QA/Evaluation question
Utilization of care	Percent using any care	Medicaid population utilizing MH treatment	DCHS	No	No	Quarter	6+ mo	?	Has utilization of mental health/chemical dependency services increased?
		Medicaid population utilizing CD treatment	DCHS	No	No	Quarter	6+ mo	?	
Patient experience of care	Satisfaction with health care	Adults less satisfied with health care received	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	Has satisfaction with health care improved?
Health system capacity	Network capacity	Adult PCP-locations accepting new adult managed Medicaid patients	PHSKC mystery shopper survey	Place	No	?	1 mo	↓	Are health providers meeting the needs of newly insured Medicaid patients?
		Wait time until new appointment with MCO-contracted PCP	PHSKC mystery shopper survey	Place	No	?	1 mo	↓	

ACA QA/Evaluation Framework – Indicator matrix

Topic area	Indicator area	Indicator	Data source	Address equity	Comparison available	Periodicity	Lag in data	Expected direction of change	General QA/Evaluation question
Population health	Preventive services	Not screened for mammography	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	Are residents more likely to meet key preventive screening and immunization recommendations?
		Not screened for colorectal cancer	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		No cholesterol screening	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
		Incomplete child vaccine series (19-35 mo)	WSIIS	Place	County, state	Continuous	2 mo	↓	
		Adults with no flu vaccine	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	
	Health status	Fair/poor health status	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	↓	Has self-reported health status improved?
		Adults with serious psychological distress	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	?	Have behavioral health outcomes improved?
		Adult excessive drinking	BRFSS	Place, race, age, sex, SES	County, state, nation	Annual	3 mo	?	
		Hospitalizations for behavioral health conditions	CHARS	Place, age, area SES	County, state	Annual	1 yr	?	
		Drug-related deaths	Death records	Place, race, age, sex, SES	County, state, nation	Annual	9 mo	?	
		Alcohol-related deaths	Death records	Place, race, age, sex, SES	County, state, nation	Annual	9 mo	?	
		Suicides	Death records	Place, race, age, sex, SES	County, state, nation	Annual	9 mo	?	

Indicators included in summary health care disparities [figure](#) by demographics

Demographic category	Age	Sex	Race/ethnicity	Education	Employment	Region
Insurance coverage	<input checked="" type="checkbox"/>					
Unmet medical need	<input checked="" type="checkbox"/>					
Annual checkup	<input checked="" type="checkbox"/>					
Annual dental visit	<input checked="" type="checkbox"/>					
Mammography screening			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Colorectal cancer screening		<input checked="" type="checkbox"/>				
Cholesterol screening		<input checked="" type="checkbox"/>				
Flu shot	<input checked="" type="checkbox"/>					
Childhood vaccinations						<input checked="" type="checkbox"/>
Fair/poor health status	<input checked="" type="checkbox"/>					
Adequate prenatal care			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Uncompensated hospital care	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
TOTAL	7	9	10	10	9	12