2012 Performance Measure Comparative Analysis Report

Washington State Healthy Options
Children's Health Insurance Program
Washington Medicaid Integration Partnership

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Executive Summary

The Medicaid program in Washington, administered by the Health Care Authority (HCA), provides healthcare benefits for about 1.2 million low-income residents, more than half of whom are enrolled in the Healthy Options managed care program. In addition, about 4,800 beneficiaries are enrolled in the Washington Medicaid Integration Partnership (WMIP), which serves categorically needy aged, blind, and disabled clients in Snohomish County.

This report presents the 2012 findings for managed care enrollees in numerous Healthcare Effectiveness Data and Information Set (HEDIS®) performance measures.* Developed and maintained by the National Committee for Quality Assurance (NCQA), the HEDIS measures are used by consumers to compare health plan performance; by purchasers to compare plan data with national averages; and by health plans to identify best practices or improvement opportunities. HCA has used HEDIS measures to assess health plan performance since 1998.

Acumentra Health produced this report under its contract with HCA as the External Quality Review Organization for Washington. This assessment covers health care delivered in reporting year 2012 (measurement year 2011) by seven managed care organizations (MCOs):

- Asuris Northwest Health
- Columbia United Providers
- Community Health Plan
- Group Health Cooperative
- Kaiser Permanente Northwest
- Molina Healthcare of Washington
- Regence BlueShield

HEDIS results for a measurement year (the year in which care is delivered) are gathered, audited, and reported the following year and are based on a statistically valid random sample of enrollees.

Results

Overall, the Healthy Options MCOs reported relatively few significant changes in performance on the HEDIS measures in 2012.

- *Immunization rates:* Following the significant declines reported in 2011, the MCOs stabilized their performance on most indicators in 2012. Exceptions were a significant improvement in the Rotavirus immunization rate and a significant decline in the Hep B rate. Statewide immunization rates remain significantly below the U.S. Medicaid averages for the majority of the 19 vaccines and combinations reported.
- *Comprehensive diabetes care:* Performance on these indicators fluctuated up or down among the MCOs in 2012. The only significant change from 2011 in the aggregate was a decline in the delivery of dilated retinal exams. The MCOs significantly underperformed the national Medicaid averages on six of the nine indicators.
- *Well-child care (WCC) visits:* Despite some improvement in 2012, the statewide averages for these three indicators remain significantly below the U.S. averages.

*HEDIS is a registered trademark of the National Committee for Quality Assurance.

Among the more positive results:

- The statewide average rate of emergency room (ER) visits by managed care enrollees fell significantly for the second straight year. ER utilization has remained significantly below the U.S. Medicaid average since 2006.
- Rotavirus immunization rates continued to improve, with all but one MCO reporting a significant increase in 2012.
- For the two indicators of blood pressure control in diabetes care, the 2012 statewide average rates were significantly higher than the national Medicaid averages.
- Average WCC visit rates for infants and adolescents showed significant gains in 2012.
- The use of high-risk medications for WMIP enrollees age 65 or older (at least one prescription or at least two different prescriptions) has declined significantly over the past five years.

Five-year trend analysis for comprehensive diabetes care identified a significant improvement in the statewide rate of monitoring for diabetic nephropathy. However, the percentage of enrollees with poor control of their HbA1c (blood sugar) levels also has risen significantly since 2008. In addition, the sharp decline in the delivery of eye exams in 2012 left the statewide average for that indicator significantly below the 2008 average.

Results for the WMIP program were mixed. The diabetes care measures in 2012 generally reflect less positive trends than in 2011. The percentage of enrollees with good control of their blood-sugar levels fell significantly, while the percentage of those with poor control rose significantly. On the positive side, ER visit rates for WMIP enrollees continued to fall, and the indicators for antidepressant medication management, follow-up after hospitalization for mental illness, and high-risk medications for the elderly also showed encouraging trends.

Data on the frequency of selected procedures and on utilization measures for the MCOs are presented in Appendix B.

Focus on member-level data

HCA has required the MCOs to submit de-identified member-level data (including elements for gender, primary language, race/ethnicity, and county) for childhood immunizations since 2007, and for WCC visits since 2008. Analysis of the 2012 member-level data revealed the following significant results by geographical region and by the enrollees' gender, primary language, race/ethnicity, and urban or rural residence.

Immunizations: As in the past several years, immunization rates in 2012 tended to be lowest in Region 3 (western and southwestern counties). Region 1 (east of the Cascades) had significantly higher rates than other regions for Hep A immunizations and for Combos 4, 7, 8, and 10. Spanish-speaking and Hispanic enrollees were immunized at the highest rates for all 19 vaccines and combinations, while Russian speakers had significantly lower immunization rates for 9 of the 10 individual vaccines. Asian enrollees had significantly higher immunization rates than other racial groups for Influenza and for Combos 2, 6, 7, and 9. Urban dwelling enrollees were immunized at significantly higher rates, compared with those living in rural areas, for many individual vaccines and for Combos 3 and 5.

WCC visits: The highest WCC visit rates again were reported in Region 2 (Seattle, the northern I-5 corridor, and island counties), though the differences with other regions were not significant except in the adolescent age group. Infants of English-speaking families again had a significantly higher visit rate than did infants in other language groups, while visit rates for adolescents were significantly lower among Russian speakers than among the other groups. Unlike in 2011, WCC visit rates for Hispanic children in 2012 were not significantly different from the rates for non-Hispanic children. Statistical tests continued to show no significant differences between genders, between urban and rural enrollees, or among racial groups.

Recommendations

Previous reports in this series have outlined recommendations for HCA and the MCOs, aimed at improving access to care and the quality and timeliness of care. Many of those recommendations remain valid, although their current feasibility may be limited by the resource constraints facing the Washington Medicaid program.

The analysis in this year's report applies to the set of seven MCOs that contracted with HCA through June 2012. The following recommendations apply to HCA's ongoing contracts with the new roster of MCOs that began serving Medicaid enrollees in July 2012.

To sustain long-term improvement in performance measures, Acumentra Health recommends that HCA

- continue to foster public health initiatives and partnerships such as the Washington State Collaborative to Improve Care and the CHILD Profile immunization registry
- collaborate with health plans to provide performance feedback to clinics and providers
- help MCOs study and overcome barriers to improve the collection of complete member-level encounter data for HEDIS measures, so the MCOs can use these data to assess resources for improving the quality of care delivered for enrollees. The EQRO continues to find gaps in immunization and well-child datasets that limit the ability to perform comprehensive analysis.
- consider implementing a collaborative performance improvement project (PIP) that would focus on reducing non-urgent ER utilization, requiring routine reporting of ER utilization to providers, and promoting enrollee education to help reduce preventable ER visits
- reinstate incentive payments to MCOs for their performance on immunization and WCC measures
- consider requiring the MCOs to engage in a formal activity to share best practices aimed at reducing the performance gaps among health plans for specific measures

In addition, Acumentra Health recommends that the MCOs

- conduct validation studies to improve the quality of encounter data to ensure that enrollees are receiving appropriate interventions
- analyze member-level data to "drill down" on core preventive measures to identify gaps in care; share results with providers and stakeholders

- dedicate resources to improve the collection, retention, and completeness of race/ethnicity data so appropriate interventions may be established to address healthcare disparities
- provide HEDIS-specific performance feedback to clinics and providers on a frequent and regular schedule
- implement interventions to improve service delivery to underserved groups, such as the children of Russian-speaking families, or children who are not receiving the delivery of the fourth DTaP vaccination in the required series
- monitor their HEDIS rates at least quarterly, using administrative data

Finally, Acumentra Health also recommends that the WMIP program analyze member-level data to drill down on performance measures and identify specific areas for improvement.

Introduction

The Medicaid program in Washington, administered by HCA, provides healthcare benefits for about 1.2 million low-income residents, more than half of whom are enrolled in the Healthy Options managed care program. Healthy Options enrollees include

- children enrolled in the Children's Health Insurance Program (CHIP)
- other categorically eligible children and mothers
- Medicaid-eligible pregnant women
- children of adults who are enrolled in the Basic Health Plus program

This report presents results for reporting year 2012 (measurement year 2011) on the HEDIS measures that HCA requires the MCOs to report. These measures allow comparison of the Washington plans' performance with national averages for the Medicaid population.

As part of the contract for delivering services to Medicaid enrollees, HCA requires the MCOs to use HEDIS to assess their performance on measures of care effectiveness, access, and use of services; to examine utilization patterns for specific services; and to report information on enrollees' race and ethnicity. Acumentra Health has reported on the MCOs' HEDIS measures each year since 2005.

Table 1 shows the name and acronym of each MCO, the number of enrollees, and the percentage of the statewide enrollment served by each plan. This report also presents the results of quality measurements for the WMIP, a pilot project aimed at improving health care for aged, blind, and disabled residents who are eligible for both Medicaid and Medicare coverage and who have complex healthcare needs.

Table 1. Managed care plans and enrollees as of December 2011.[a]

Health plan	Acronym	Number of enrollees	Percentage of all enrollees
Asuris Northwest Health	ANH	4,499	0.6
Community Health Plan	CHP	231,353	33.3
Columbia United Providers	CUP	58,826	8.5
Group Health Cooperative	GHC	20,775	3.0
Kaiser Permanente Northwest	KPNW	1,101	0.1
Molina Healthcare of Washington	MHW	339,728	48.9
Regence BlueShield	RBS	38,635	5.6
Total		**694,917**	**100.0**

[a] Source: Washington Health Care Authority. Enrollment includes Healthy Options, CHIP, and Basic Health Plus.

NOTE: This report reflects results for the above MCOs based on 2011 measurements. Effective July 1, 2012, HCA began contracting with five MCOs (CHP, MHW, and three new contractors) to provide services for Healthy Options, Basic Health, and some Supplemental Security Income clients through a joint managed care procurement. Therefore, this year's report presents the final comparative data for the seven MCOs listed above. Future reports will present results for the new roster of contracted MCOs.

Figure 1 shows the geographical distribution of health plan services throughout the state as of August 2011.

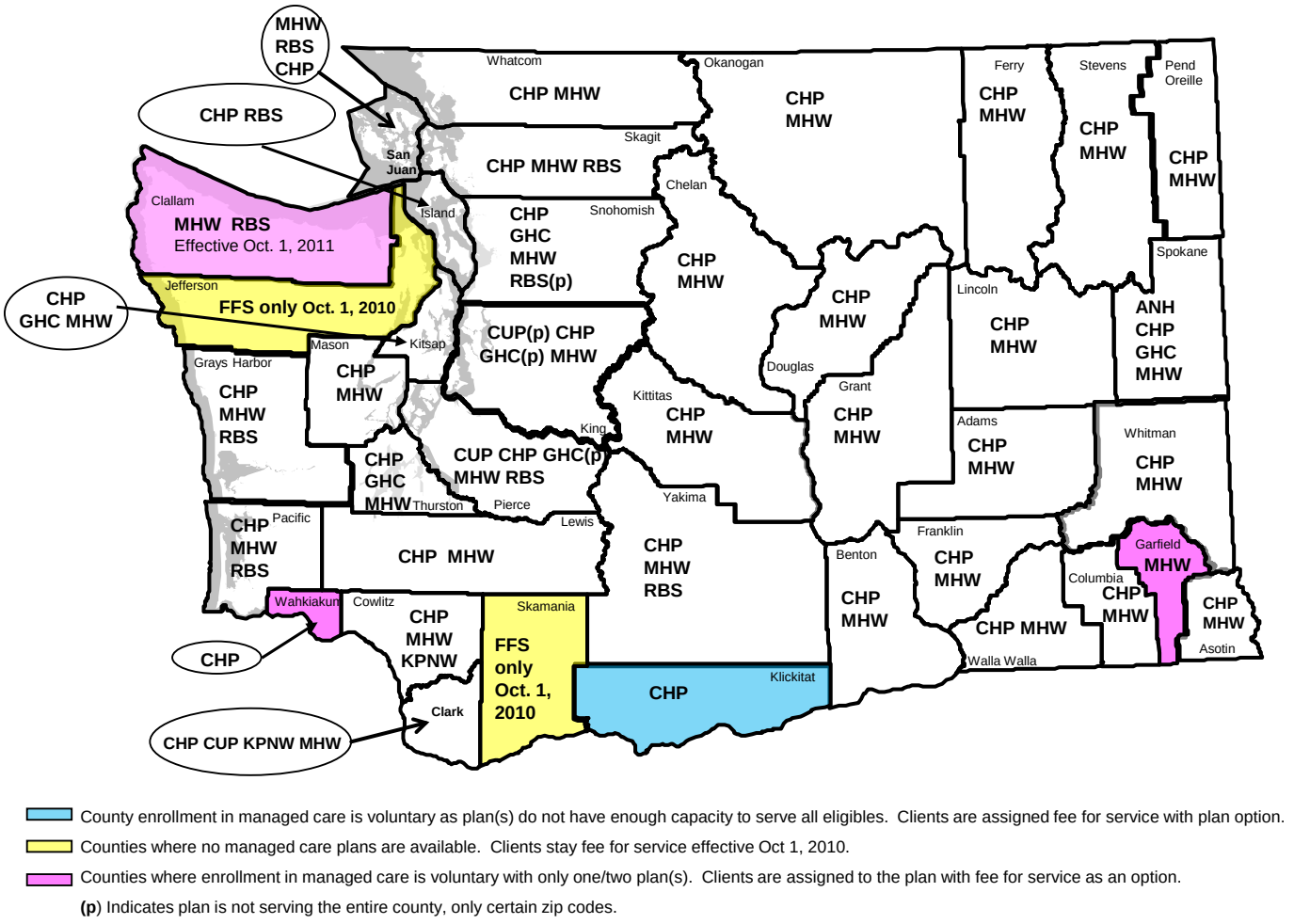


Figure 1. Coverage of Healthy Options and CHIP enrollees by health plan, 2011.

Differences in the structure and enrollee population of each MCO may affect the interpretation of the HEDIS results among health plans. For example:

- GHC and KPNW are organized around a contained staff model, with services integrated through electronic health record systems. This might facilitate the capture of data used in reporting performance measures, so that higher rates might reflect more complete data capture. Alternatively, standardized practices and electronic reminder systems to remind providers when key preventive services are due could lead to actual improvements in some performance measures.
- CHP serves enrollees in almost every county through a network of Federally Qualified Health Centers or Community Health Centers. MHW, the largest Medicaid insurer, serves enrollees throughout the state in a diverse array of settings, tailored to meet the local community needs, while CUP and RBS cover Medicaid enrollees in more limited geographical areas. Decentralized delivery models may have less complete integration of

information systems, or may find it more difficult to standardize practices among a diverse network of providers. Thus, lower rates could reflect less complete data capture or actual lower performance.

This report presents the health plans' results for each HEDIS indicator. Findings are displayed in bar charts that show

- individual health plan scores for reporting years 2011 and 2012
- the aggregated Healthy Options statewide averages for 2011 and 2012
- the NCQA national Medicaid averages for 2011 and 2012

Asterisks next to the 2012 percentages show statistically significant changes in plan performance from 2011 to 2012. Each graph also shows the 95% confidence interval (CI), indicating the upper and lower limits within which each plan percentage would be expected to fall 95 times if 100 identical studies were conducted. A small CI indicates a higher likelihood that the sample plan percentage shown by the bar is a reliable estimate of the percentage that applies to plan members overall; a large CI indicates a lower likelihood that the percentage found in the plan sample reliably estimates the percentage of overall plan members. A small CI, therefore, indicates greater precision, usually due to adequate sample sizes.

Appendix B presents complete five-year data on all indicators for all health plans.

Methods

HEDIS results for a measurement year (the year in which care is given) are gathered, audited, and reported the following year, called the reporting year. Results are based on a statistically valid random sample of health plan enrollees. The HEDIS technical specifications set stringent criteria for identifying the eligible population for each measure.[1]

To ensure data integrity, NCQA verifies that a health plan collects data according to the technical specifications. Each plan's data collection process is audited by an NCQA-certified HEDIS auditor. The NCQA HEDIS Compliance Audit™ assures purchasers and health plans of fair and accurate comparisons of plan performance. HCA funds the HEDIS audit for the MCOs to fulfill the federal requirement for validation of state performance measures.

Acumentra Health compiled individual plan data for the tables and charts in this report from the NCQA-audited Interactive Data Submission System (IDSS) results.[2] Plans with denominators of fewer than 30 eligible enrollees are identified as such, as are plans that did not report the measure in the reporting year.

Acumentra Health calculated the state average for each measure and indicator by adding individual plan numerators and denominators, dividing the aggregate numerator by the aggregate denominator, and multiplying the resulting proportion by 100. The 2012 national Medicaid averages came from NCQA's *Quality Compass*® report, based on data from more than 150 Medicaid managed care health plans.[3]

For the WMIP program, MHW reported 10 measures in 2012, three of which were reported for the first time. As part of the 2012 HEDIS audit for MHW, the WMIP program underwent a certified HEDIS audit that incorporated the validation of performance measures and the Centers for Medicare & Medicaid Services' Information Systems Capabilities Assessment tool.

Note: HEDIS measures are not designed for case-mix adjustment or risk adjustment for existing co-morbidities, physical or mental disabilities, or severity of disease. Therefore, when reviewing and comparing plan performance, it may be difficult to determine whether differences among plan rates were due to differences in the use of services or quality of care, or to differences in the health of the plan's population.

Administrative vs. hybrid data collection

For four measures—childhood immunizations, postpartum care, WCC visits, and diabetes care—the HEDIS technical specifications allow a health plan to collect data by the administrative or the hybrid method. In the administrative method, a plan identifies the eligible population and uses data from its information systems—such as claims and encounter data—to identify enrollees who received the service(s) for the measure. This method is cost-efficient, but can produce lower rates if providers submit incomplete data. In the hybrid method, a health plan performs supplemental medical chart reviews to identify enrollees who received the service(s) but whose services were not represented in the administrative data. Regardless of the data collection method, eligible enrollees who received services are counted as "numerator events."

When the hybrid method is used for calculating HEDIS rates, health plans can minimize the use of expensive medical chart review by capturing a greater percentage of numerator events through valid administrative data. Electronic medical record (EMR) systems have enabled better capture

of discrete clinical data. However, for clinics without robust EMRs or with no EMR, the health plan must examine medical charts to obtain detailed clinical data, such as blood pressure information. Plans that supplement their administrative data with chart review may boost the number of numerator events and raise their scores on those measures. A sample of hybrid numerator events is validated as part of the HEDIS audit process.

For the past several years, Acumentra Health has analyzed and reported on the difference between HEDIS rates calculated through the administrative vs. the hybrid method. For 2012, analysts calculated how much each MCO's rate increased with the addition of the chart review results for each indicator of childhood immunization, WCC, postpartum care, and diabetes care. The rate increases due to the additional numerator events ranged from 0 to 22 percentage points.

With regard to childhood immunizations, RBS and MHW rates showed the greatest increase with the addition of the hybrid data. Overall, the Combo 2 rate increased by 3 to 10 percentage points across the health plans. For postpartum care, CUP showed the greatest increase in its rate with the addition of the chart review results, 35 percentage points. For WCC (infants with six or more visits), RBS had the largest increase, 19 percentage points. Several diabetes care indicators, most notably blood-pressure control, eye exams, and lipid level, benefit the most from the hybrid data collection method.

Certain other measures, including WCC visits for children and adolescents, showed gains ranging from 1 to 10 percentage points due to collection of medical chart data.

Member-level data analysis

HCA has required the MCOs to submit de-identified member-level data (including elements for gender, primary language, race/ethnicity, and county) on childhood immunizations since 2007, and on WCC visits since 2008. Acumentra Health received enough data in 2012 to analyze and report differences in performance by HCA region, gender, primary language, race/ethnicity, and urban/rural residence. Detailed results appear in the immunization and WCC sections of this report.

In analyzing the member-level data, Acumentra Health analysts first checked each data field submitted by each health plan for missing and out-of-range data. Certain fields should have no missing data, such as the field indicating whether a person can or cannot be counted in the numerator for a measure. Fields indicating race, ethnicity, and language preference should have only a small range of discrete values.

As an additional check, Acumentra Health calculated the rate for each immunization and WCC indicator, using the "clean" member-level data, then compared these calculations with the rates the MCOs reported in the IDSS. In the case of any difference, analysts contacted the MCO to resolve the discrepancy.

Analysts then aggregated the MCO-level data sets into a single data set, and used SAS software to calculate rates by region, race, ethnicity, language preference, and urban/rural residence.

Childhood Immunization Status

HCA now requires the MCOs to report 19 indicators of childhood immunization status (10 individual antigens plus 9 combinations of antigens), as defined below. HCA required the plans to report the Hep A, Rotavirus, and Influenza vaccine indicators, along with Combo 4–10 rates, for the first time in 2010.

Measure definition

This measure assesses the percentage of enrolled children who turned two years old during the measurement year, who were continuously enrolled for 12 months immediately preceding their second birthday, and who received the following vaccinations:

- four diphtheria, tetanus, and acellular pertussis (DTaP)
- three polio (IPV)
- one measles, mumps, and rubella (MMR)
- two *Haemophilus influenzae* type b (HiB)
- three hepatitis B (Hep B)
- one varicella-zoster virus (VZV)
- four pneumococcal conjugate (PCV)
- two hepatitis A (Hep A)
- two or three rotavirus (RV)
- two influenza (flu)
- Combination #2 (Combo 2) includes all antigens listed above except for PCV; received four
- Combination #3 (Combo 3) includes all antigens listed above; received four
- Combination #4 (Combo 4) includes Combo 3 plus Hep A
- Combination #5 (Combo 5) includes Combo 3 plus RV
- Combination #6 (Combo 6) includes Combo 3 plus flu
- Combination #7 (Combo 7) includes Combo 3 plus Hep A and RV
- Combination #8 (Combo 4) includes Combo 3 plus Hep A and flu
- Combination #9 (Combo 9) includes Combo 3 plus RV and flu
- Combination #10 (Combo 10) includes Combo 3 plus Hep A, RV, and flu

Data collection method: Administrative or hybrid

Five-year trends in childhood immunization rates

Figure 2 shows the statewide averages for the Combo 2 and Combo 3 indicators for reporting years 2008–2012. As shown, Combo 2 and Combo 3 rates stabilized in 2012 after dropping in 2011. These rates are now about level with those reported in 2008. The Washington MCO averages remain significantly below the NCQA national averages.

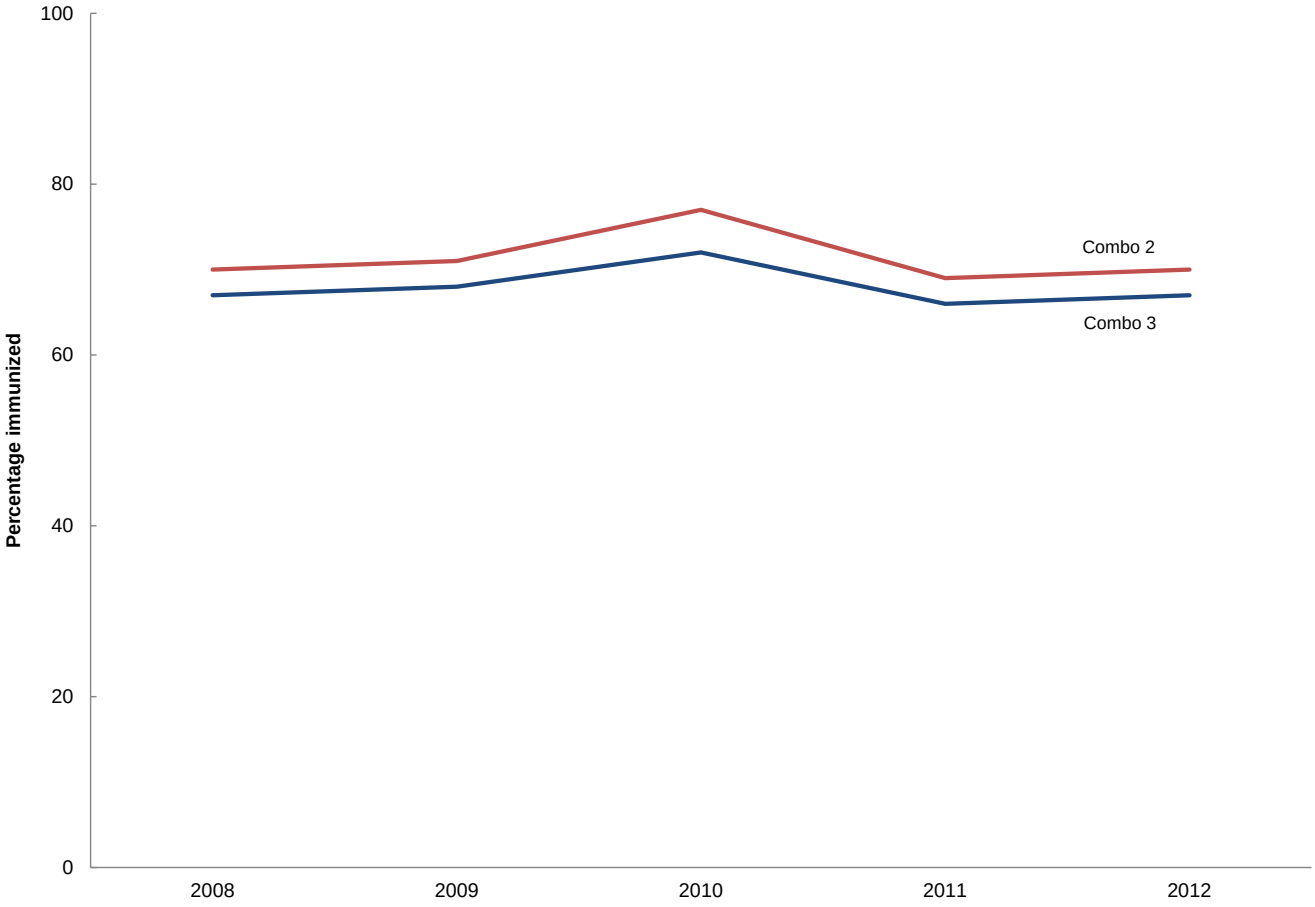


Figure 2. State averages for Combo 2 and Combo 3, reporting years 2008–2012.

MCO-level data analysis

Figures 3–14 depict the 2011–2012 trends by health plan for childhood immunization indicators, excluding Combos 4–10. Appendix B reports up to five years of data for all indicators.

Immunization rates in 2012 basically reflected a holding pattern, with few significant changes from 2011 at either the statewide or MCO level. The most notable exceptions were:

- The statewide average rate for Hep B immunizations fell significantly in 2012, to 85.79%, now significantly below the U.S. average.
- The MCOs continued to report strong gains in Rotavirus vaccinations. The average statewide rate for this indicator rose significantly in 2012, to 63.87%, essentially level with the U.S. average, with all but one MCO reporting significant increases.

Considering individual antigens, the statewide average rates for DTaP, IPV, MMR, HiB, Hep A, and VZV remain significantly below the U.S. averages.

Among MCOs, CHP continued to report the highest rates for all indicators except Influenza. CHP's 2012 immunization rates were significantly higher than the statewide average for all vaccines except for HiB and Influenza. In contrast, CUP's 2012 rates were significantly below average for 8 of the 10 vaccines.

Diphtheria, Tetanus, and Pertussis (DTaP)

Figure 3 displays the 2011–2012 results for DTaP immunizations by health plan. As shown, the trend in immunization rates varied among MCOs, and none of the changes from 2011 to 2012 were statistically significant. CHP's 2012 rate (80.54%) was significantly higher than the state average, while CUP's rate (69.59%) was significantly lower than average.

A successful "numerator event" for this indicator depends on delivering four shots during the measurement year. Acumentra Health analysts, using 2012 member-level data, calculated the difference in DTaP rates based on lower numbers of shots. The statewide DTaP rate would have been 84.44% if only one shot were required, 83.24% if two shots were required, and 81.60% if three shots were required.

This year's epidemic of pertussis in Washington underscores the importance of delivering the full series of DTaP vaccinations for infants, as well as Tdap boosters for older children and adults. Through late November, 4,548 pertussis cases had been reported in 2012, about seven times as many cases as in the same period of 2011.[4] All but one of the state's 39 counties had reported pertussis cases, and the highest rates were reported for children under age 1.

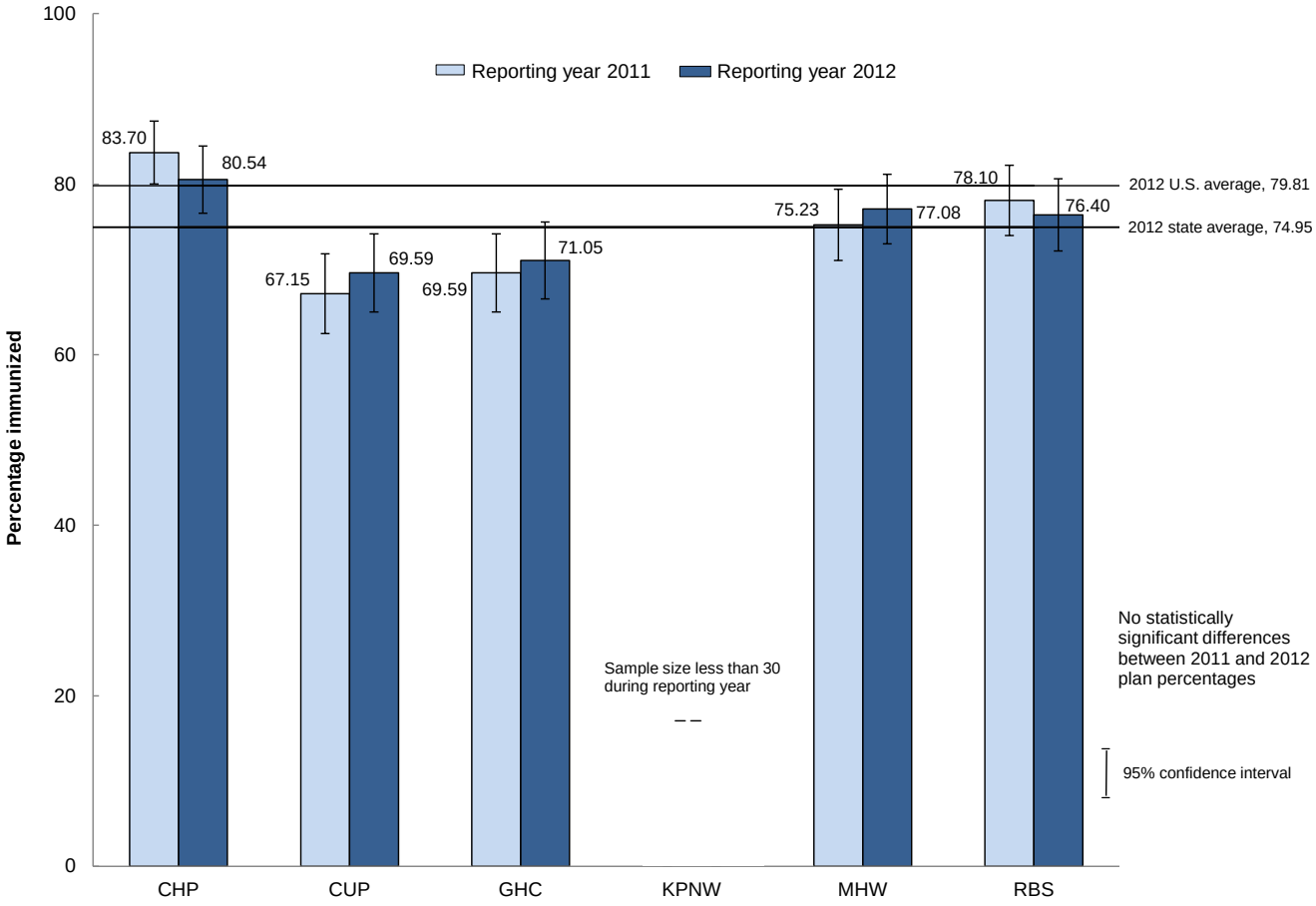


Figure 3. DTaP immunizations by health plan, reporting years 2011–2012.

Inactivated Polio Vaccine (IPV)

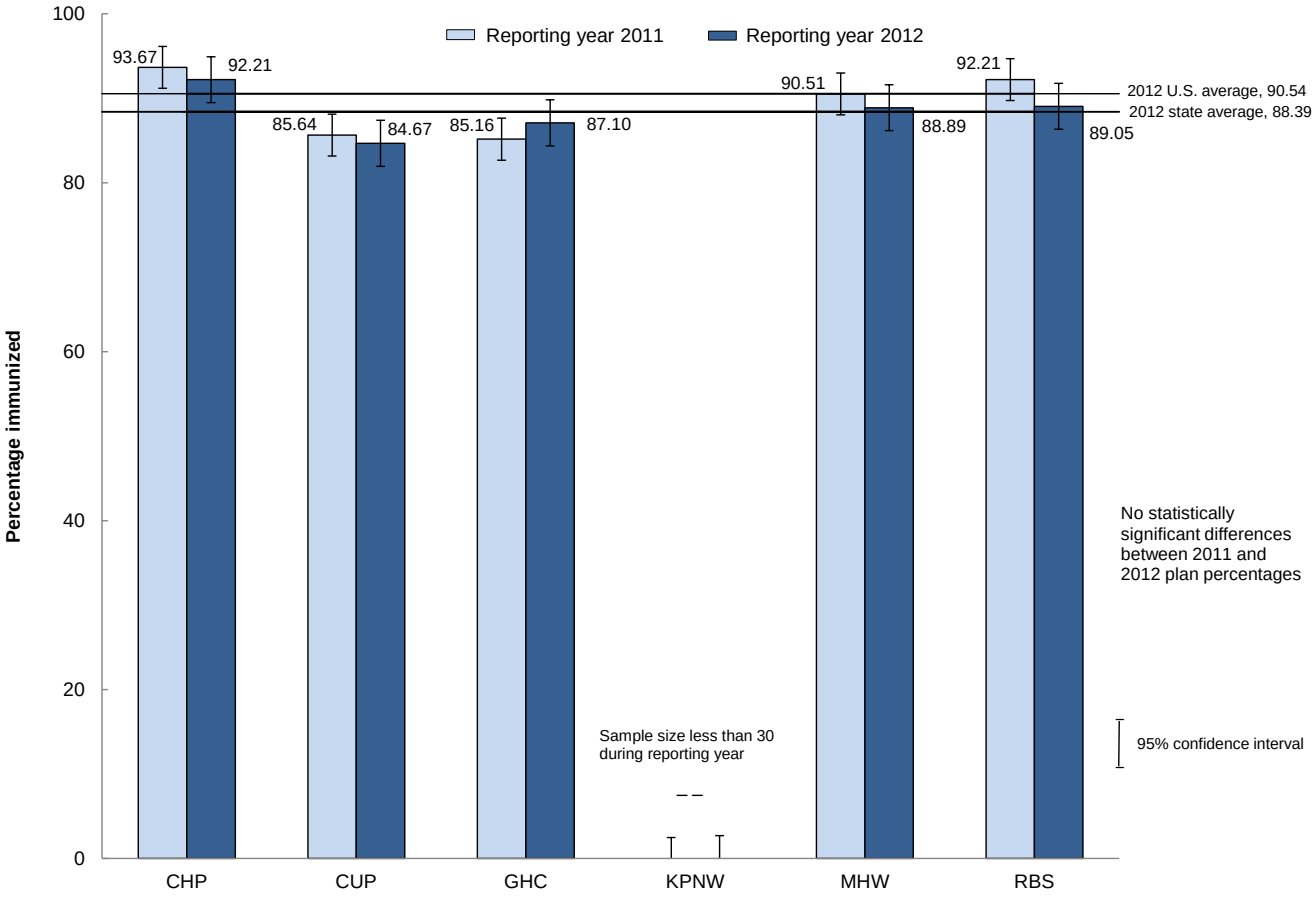


Figure 4. IPV immunizations by health plan, reporting years 2011–2012.

Measles, Mumps, and Rubella (MMR)

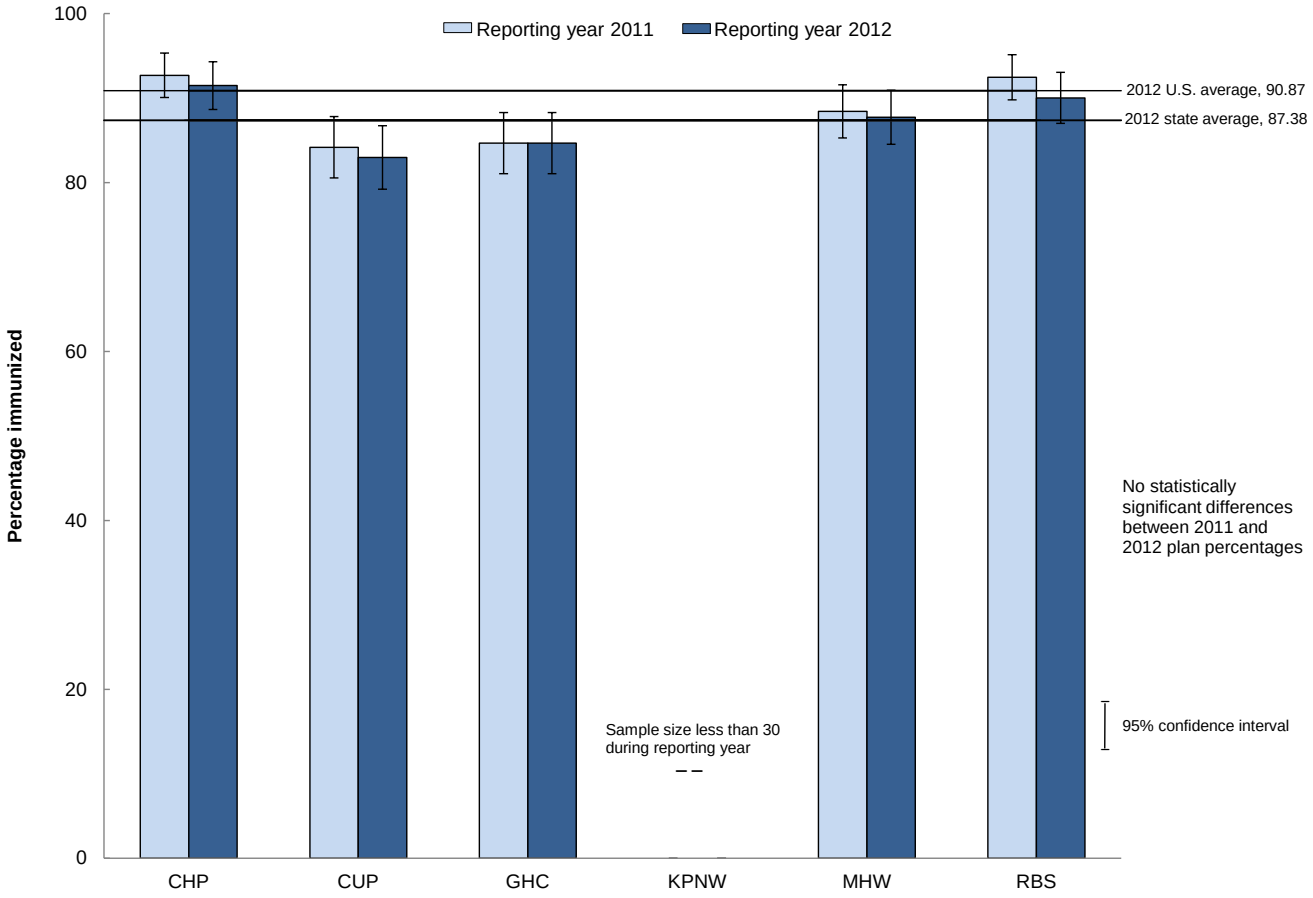


Figure 5. MMR immunizations by health plan, reporting years 2011–2012.

Haemophilus Influenzae Type B (HiB)

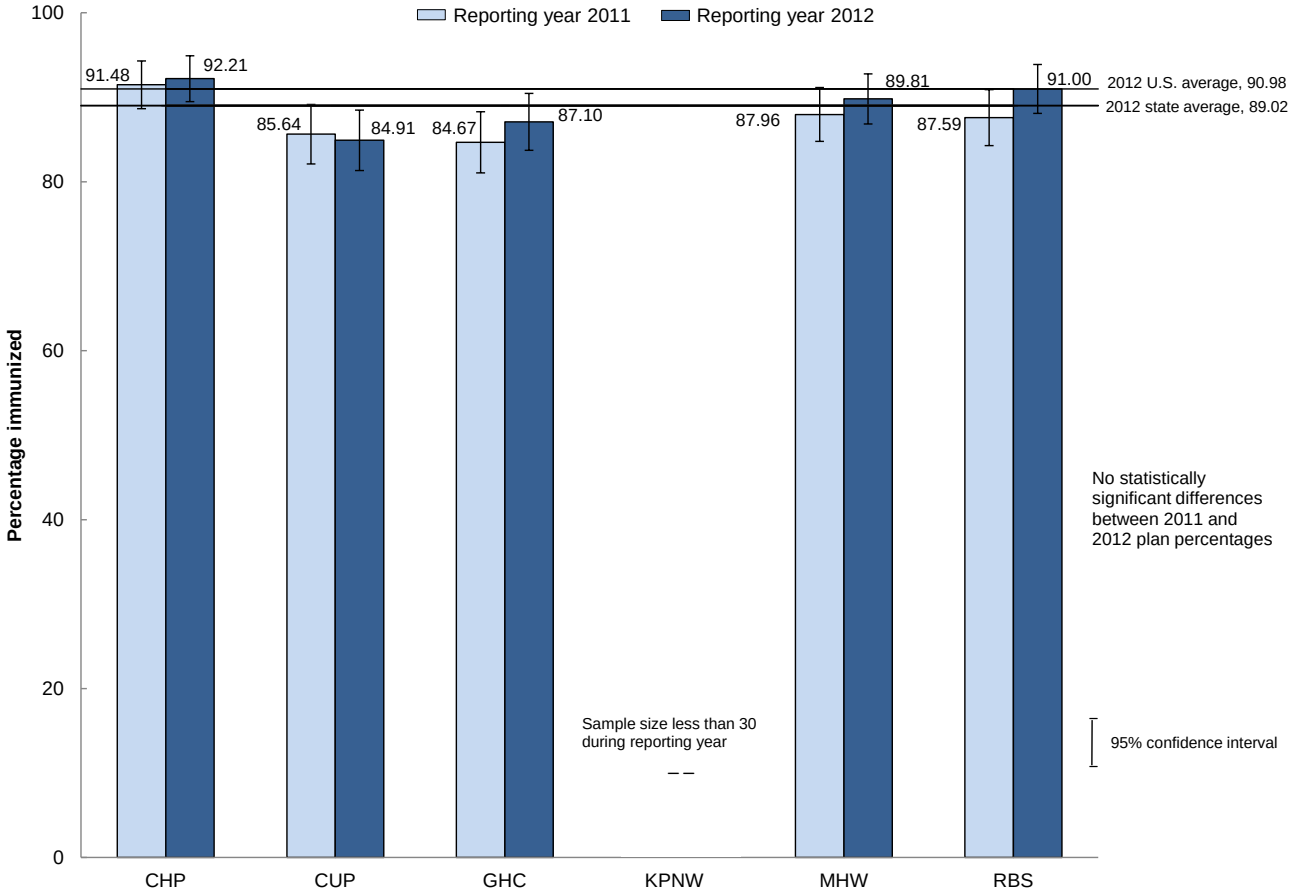


Figure 6. HiB immunizations by health plan, reporting years 2011–2012.

Hepatitis B (Hep B)

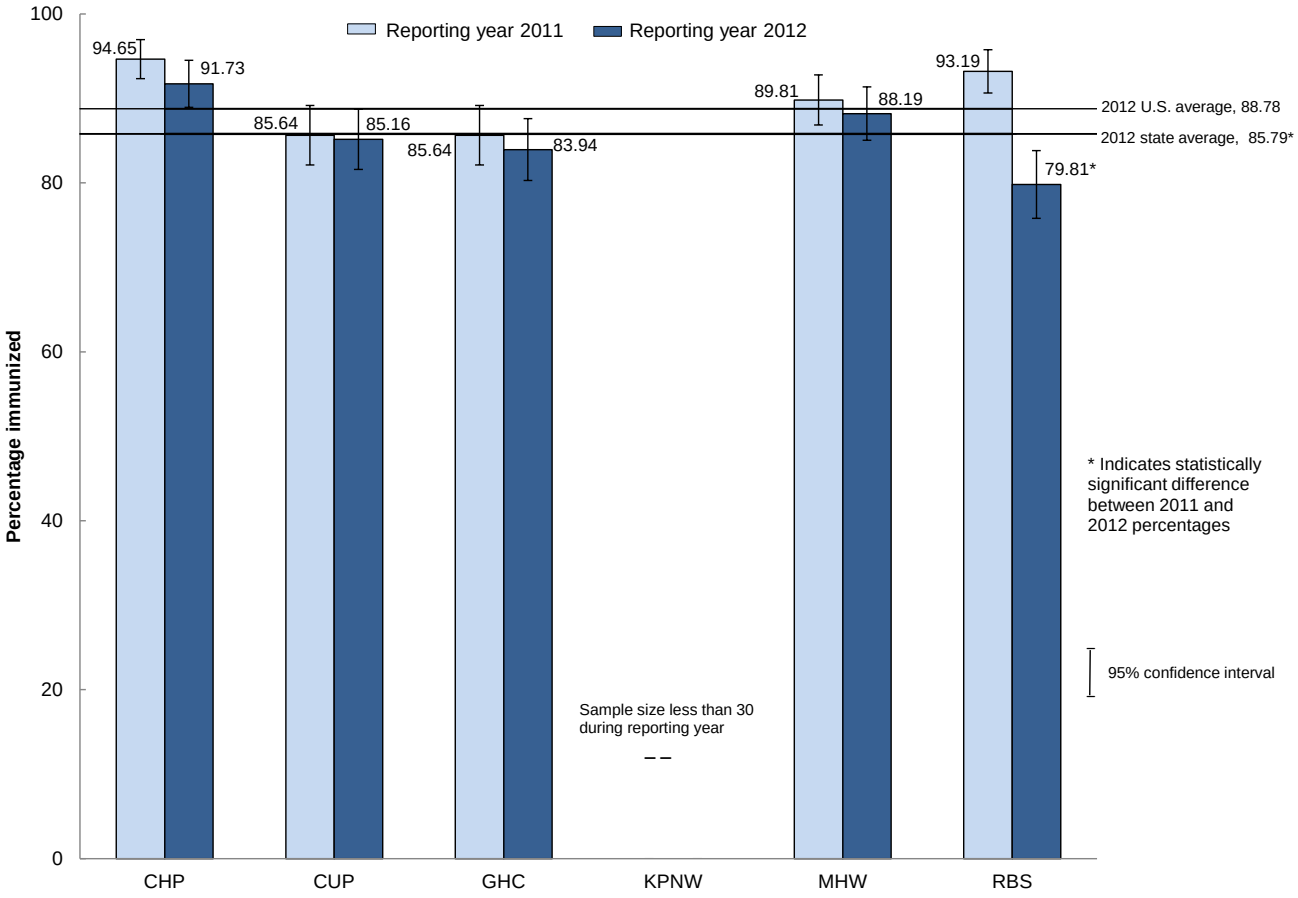


Figure 7. Hep B immunizations by health plan, reporting years 2011–2012.

Varicella-Zoster Virus (VZV)

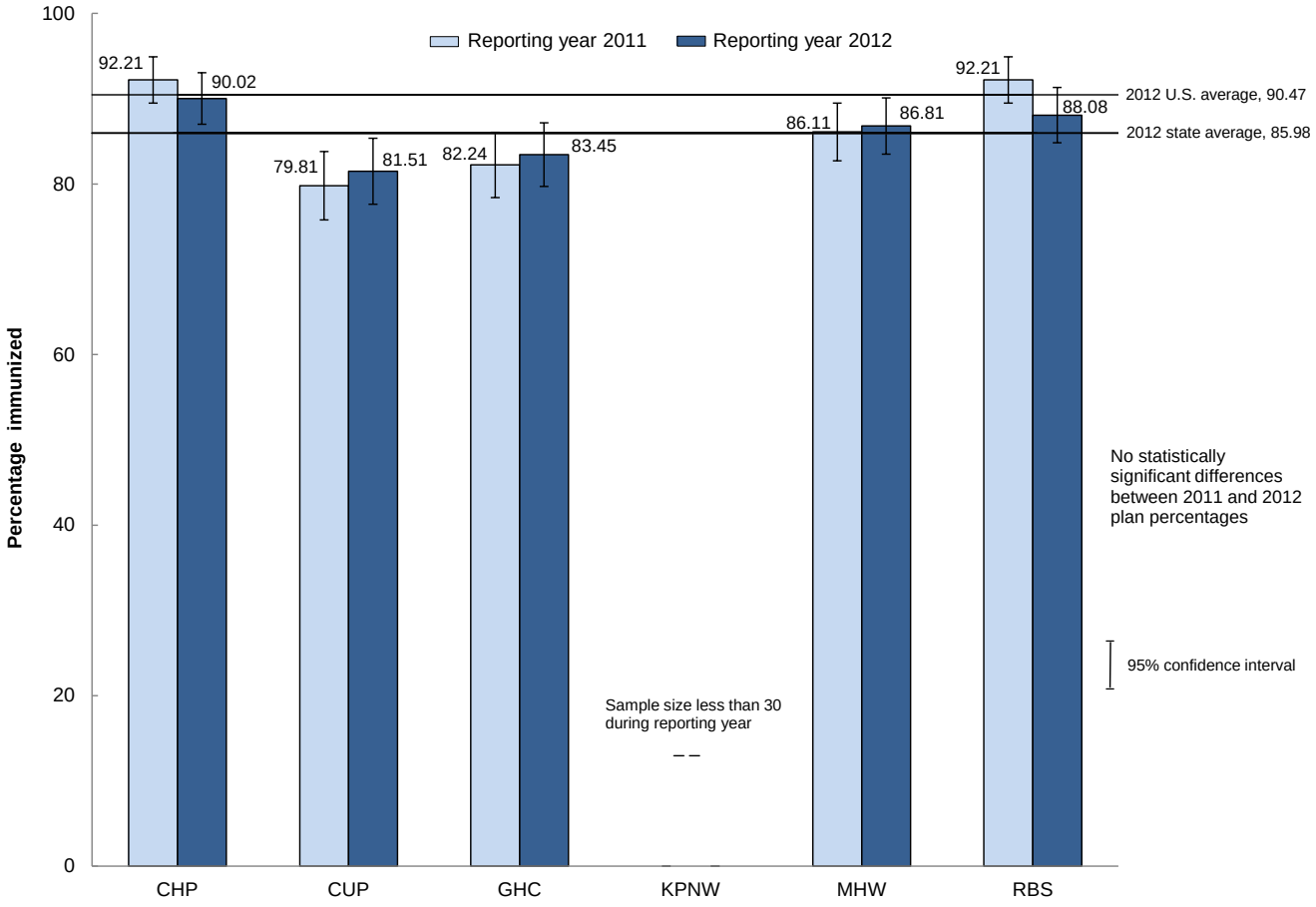


Figure 8. VZV immunizations by health plan, reporting years 2011–2012.

Pneumococcal Conjugate (PCV)

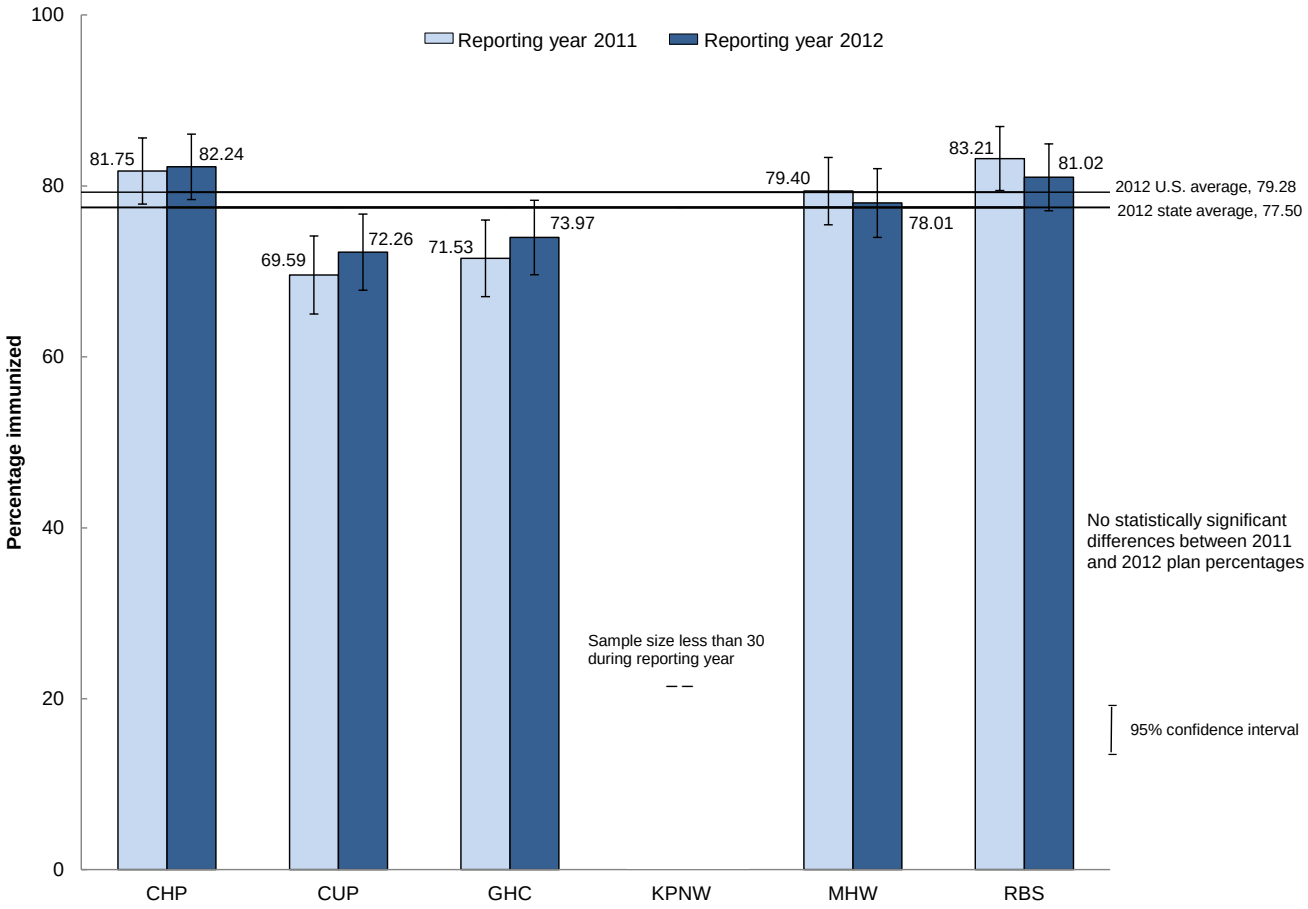


Figure 9. PCV immunizations by health plan, reporting years 2011–2012.

Hepatitis A (Hep A)

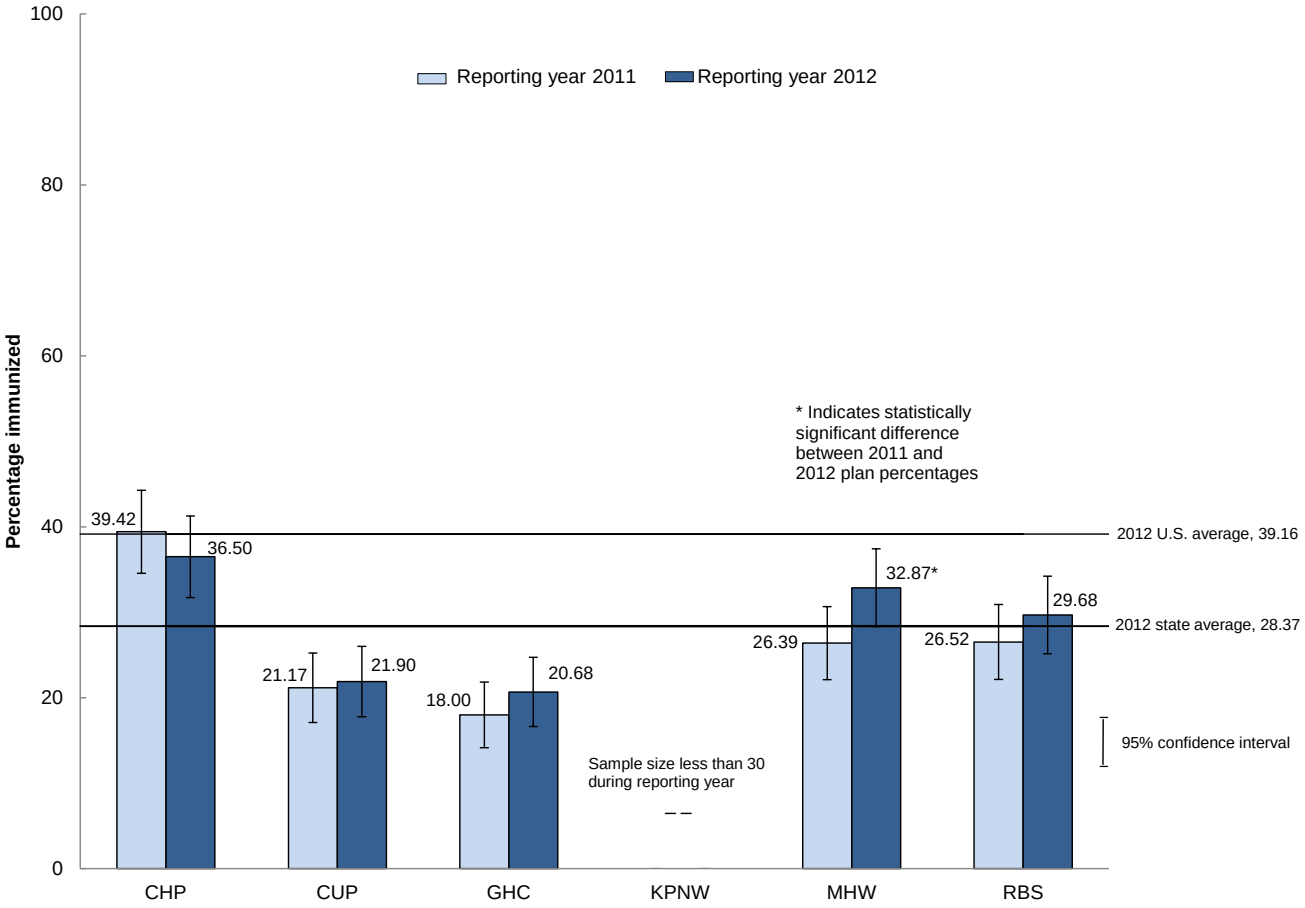


Figure 10. Hep A immunizations by health plan, reporting years 2011–2012.

Rotavirus

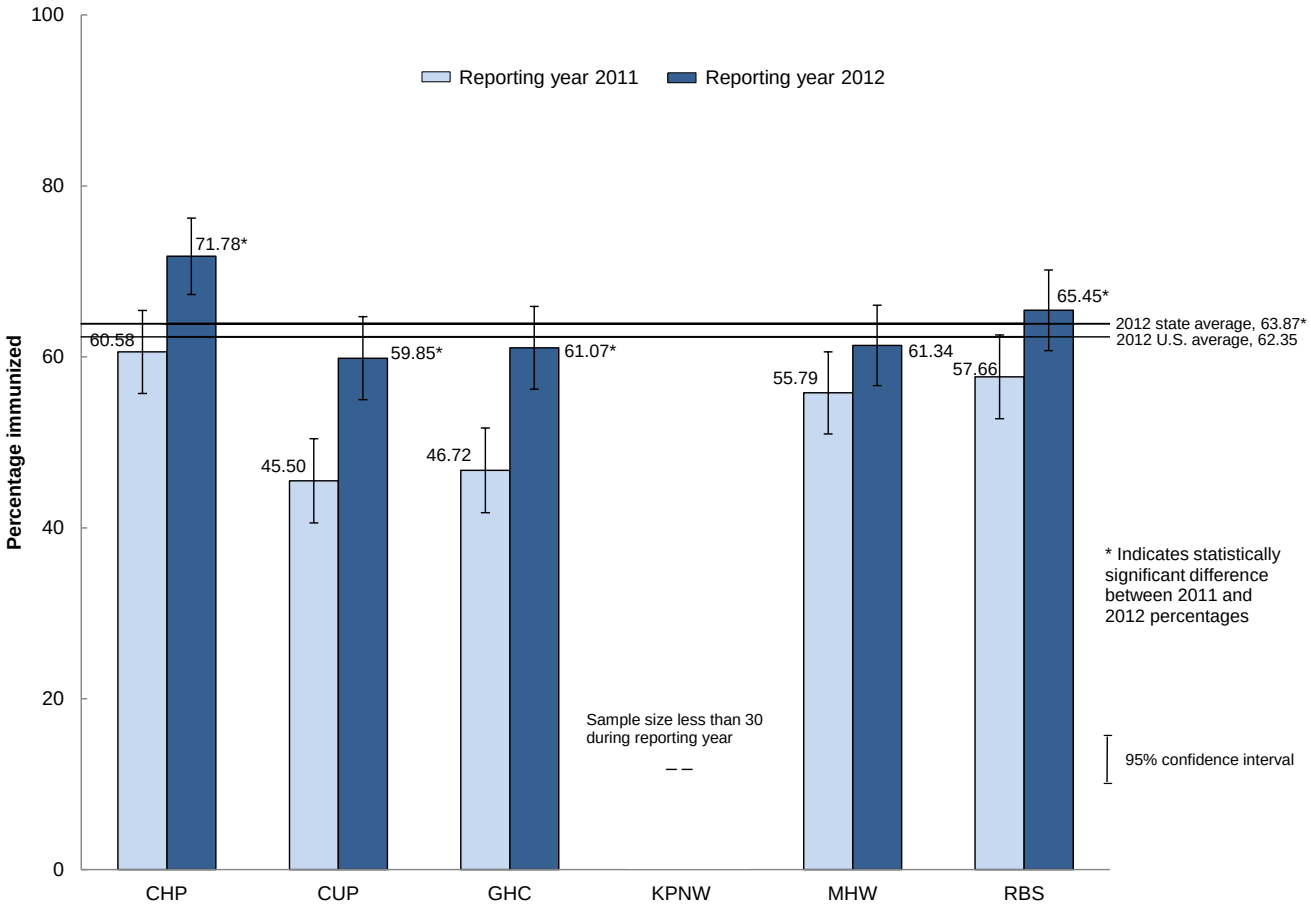


Figure 11. Rotavirus immunizations by health plan, reporting years 2011–2012.

Influenza

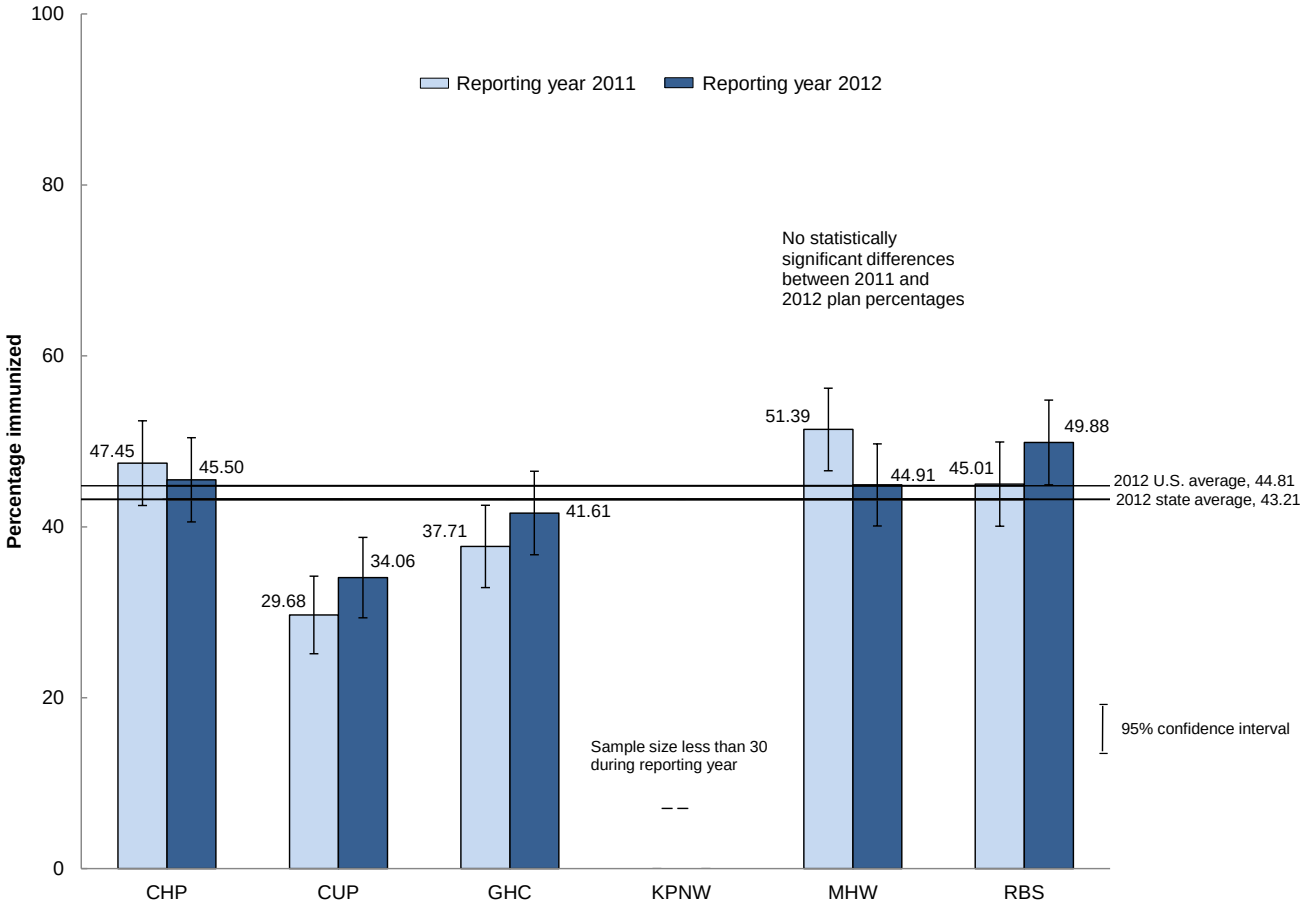


Figure 12. Influenza immunizations by health plan, reporting years 2011–2012.

Combination #2 (Combo 2)

The Combo 2 indicator measures the percentage of children who received the following numbers of vaccinations:

- four DTaP
- three IPV
- one MMR
- two HiB
- three Hep B
- one VZV

From 2011 to 2012, Combo 2 rates among the MCOs showed insignificant up-or-down changes. CHP's 2012 rate of 77.37% significantly exceeded the state average.

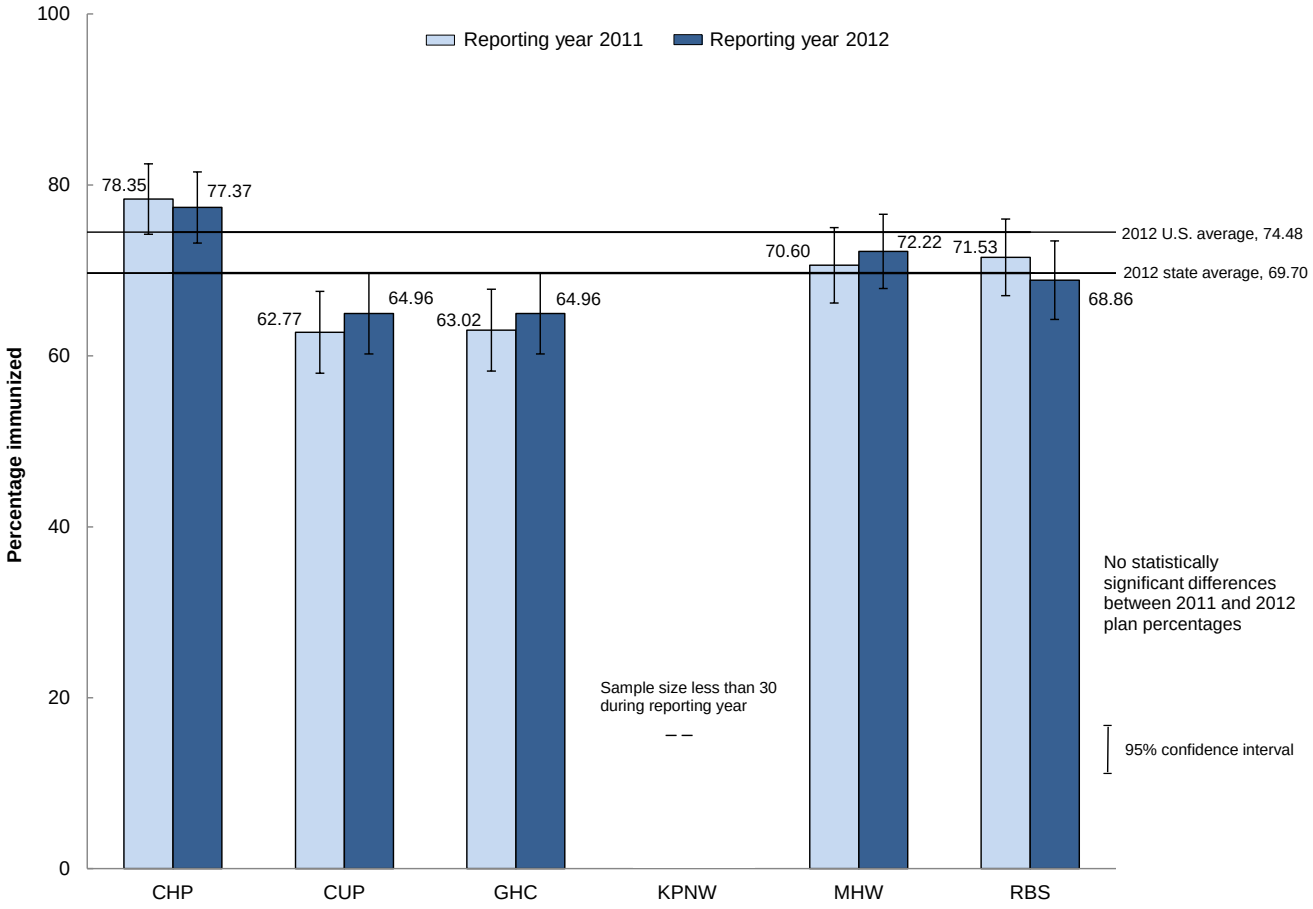


Figure 13. Combo 2 immunizations by health plan, reporting years 2011–2012.

Combination #3 (Combo 3)

The Combo 3 indicator captures all vaccinations that are part of Combo 2, plus PCV vaccinations. In 2012, CHP significantly outperformed the state average of 66.71%, while CUP's rate was significantly below average.

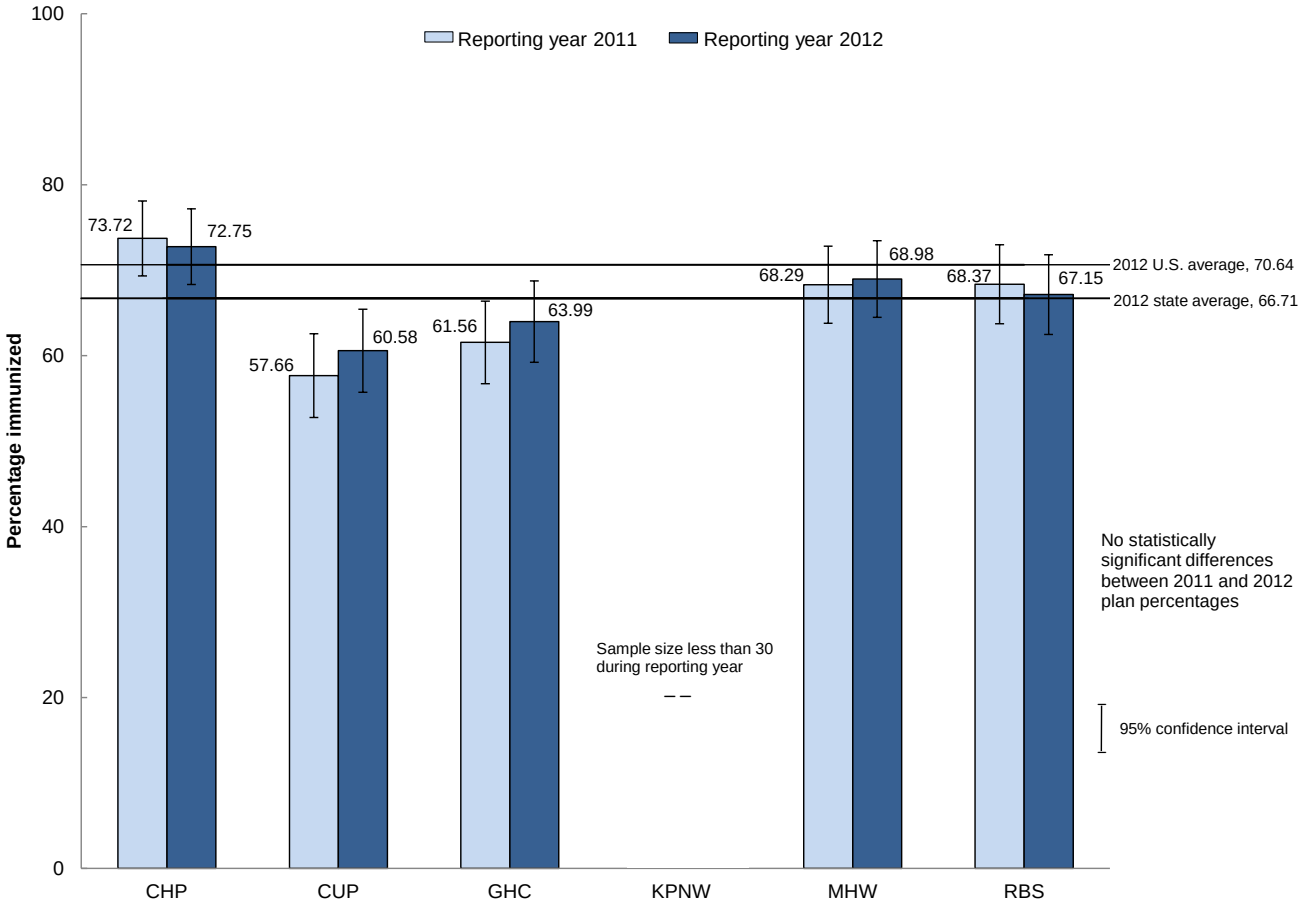


Figure 14. Combo 3 immunizations by health plan, reporting years 2011–2012.

Member-level data analysis

HCA required the MCOs to submit de-identified member-level data on childhood immunizations. Acumentra Health received enough data in 2012 to analyze differences in performance by HCA region, gender, primary language, race/ethnicity, and urban/rural residence. Highlights of this analysis are reported below.

HCA defines three regions for the purpose of analyzing health care patterns:

Region	Counties
1	Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Whitman, Walla Walla, Yakima
2	Island, King, San Juan, Skagit, Snohomish, Whatcom
3	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

Rates by region:

- In 2012, Region 1 had a significantly higher Hep A immunization rate (34.38%) than other regions, and significantly higher rates for Combos 4, 7, 8, and 10.
- Region 3 significantly underperformed the other regions in 9 of the 19 vaccines or combinations (MMR, HiB, VZV, PCV, Hep A, and Combos 4, 7, 8, and 10). These differences are similar to those reported in 2011.

Rates by primary language:

- In 2012, Spanish-speaking enrollees had significantly higher immunization rates than did Russian and English speakers for all 19 vaccines or combinations. Spanish speakers also were vaccinated at higher rates for most indicators in 2011 and 2010.
- Russian-speaking enrollees had significantly lower immunization rates than English and Spanish speakers for 9 of the 10 vaccines and for Combo 5. A similar pattern was evident in 2011 and 2010.
- The Rotavirus immunization rate rose significantly for both English and Spanish speakers in 2012, reaching 62.46% and 71.80%, respectively. Russian speakers experienced a similar upward shift of about 11%, but the sample size for this group was too small to detect change in a significance test.

Rates by race/ethnicity:

- In 2012, the Asian racial group was large enough to compare with the African-American and White groups. Asians had significantly higher immunization rates than other groups for Influenza (59.38%) and for Combos 2, 6, 7, and 9.
- Immunization rates were significantly higher for Hispanic than for non-Hispanic enrollees for all 19 vaccines or combinations. Higher rates also were reported for the Hispanic group for the majority of indicators in 2011 and 2010.

Rates by urban/rural residence:

- In 2012, enrollees living in urban areas were immunized at significantly higher rates, compared with those in rural locations, for IPV, MMR, Hep B, VZV, PCV, Rotavirus, and Combos 3 and 5. The differences this year are more pronounced than those noted in 2011.

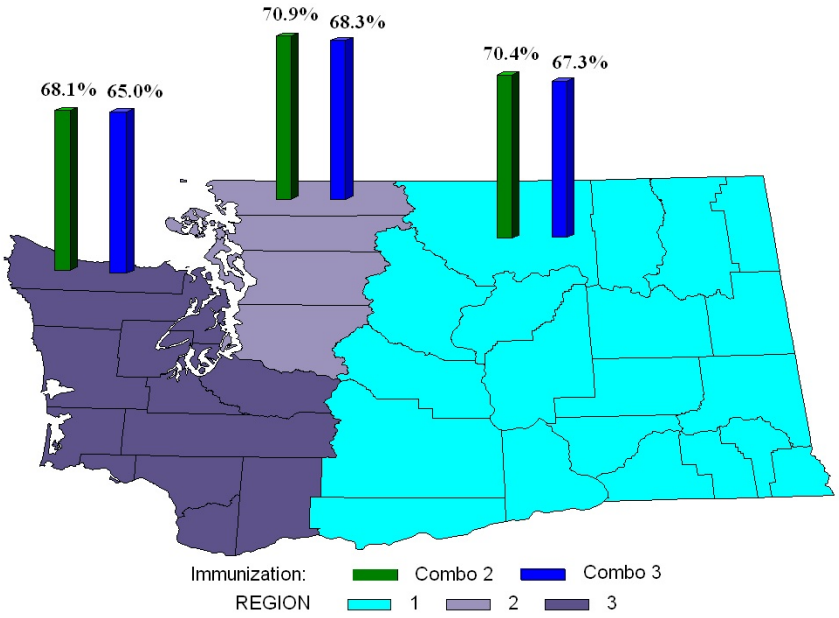
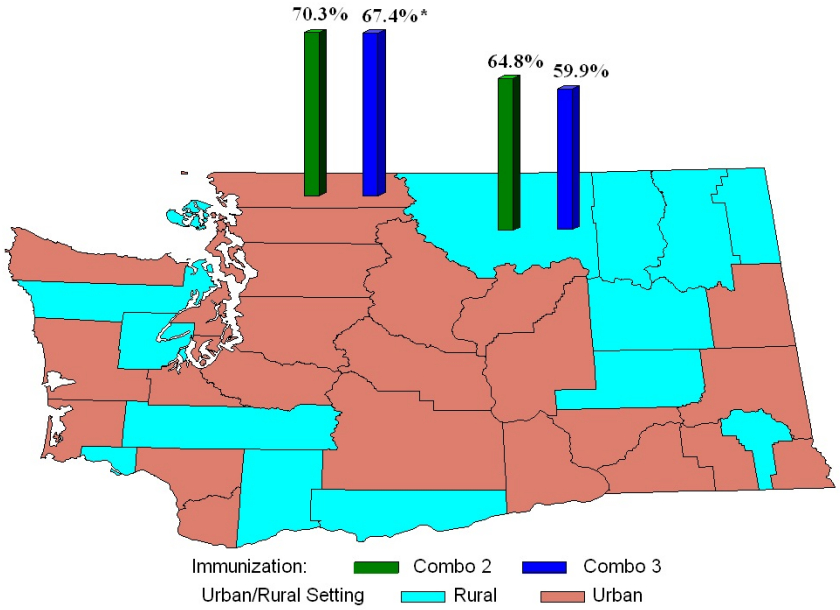


Figure 15. Combo 2 and 3 immunization rates by region, reporting year 2012.



* Indicates statistically significant difference in urban vs. rural rates ($p<0.05$).

Figure 16. Combo 2 and 3 immunization rates by urban/rural residence, reporting year 2012.

Discussion

Following the significant declines reported in 2011, the Healthy Options MCOs stabilized their performance on most immunization indicators in 2012. Considering the 19 antigens and combinations reported in 2012, the statewide immunization rates are significantly below the U.S. Medicaid averages for all but PCV, Rotavirus, Influenza, and Combos 5, 6, and 9.

Among MCOs, CHP remained the top performer for immunizations, while CUP continued to report below-average performance.

As in previous years, immunization rates tended to be lowest in Region 3 (western and southwestern counties). Spanish-speaking and Hispanic enrollees were vaccinated at the highest rates for all 19 antigens and combinations, while children of Russian-speaking families had significantly lower immunization rates for 9 of the 10 antigens. Asian enrollees had significantly higher immunization rates than other racial groups for Influenza and for Combos 2, 6, 7, and 9. Urban dwelling enrollees were immunized at significantly higher rates, compared with those living in rural locations, for many individual antigens and for Combos 3 and 5.

"Herd immunity" exists when a group resists attack by a disease because a large percentage of individuals are immune, though outbreaks of disease can and do occur even when a high level of herd immunity is reached.[5] Given that the statewide average immunization rates for Medicaid managed care enrollees are below 90% for all vaccines—and below 80% for DTaP and PCV—the MCOs need to continue to seek ways to improve their immunization rates.

Recognizing the disparity in immunization rates by language group, HCA and the Department of Health (DOH) developed an intervention targeting the children of Russian-speaking families. In the first phase, health education staff in DOH's Health Promotion Practice and Policy Section studied factors influencing immunization rates in Russian-speaking populations. Researchers reviewed the scientific literature on attitudes of these populations with respect to immunization; interviewed key informants in Russian-speaking communities, including local public health and medical providers, social workers, community and religious leaders, and academicians; and led four focus groups with parents of young children in communities with large Russian-speaking populations. The study recommended a variety of measures by which DOH might address issues related to doctor-patient relationships, language barriers, and information gaps.[6]

The Centers for Disease Control and Prevention has identified Washington as the state with the highest percentage of exemptions from school vaccination requirements.[7] State law (ESB 5005, 2011) now requires a parent or guardian who seeks an exemption to obtain a note from a health care practitioner, stating that the parent or guardian has been informed of the benefits and risks of immunization. In 2010, GHC began participating in a grant-funded pilot project to address parents' hesitancy to have their children vaccinated. The effort includes a social marketing awareness campaign and development of a training toolkit for pediatric and family-practice providers. TeaMonitor, the interagency review team that monitors MCOs' contract compliance, cited this project as a best-practice intervention to improve immunization rates.

DOH's Washington State Immunization Information System (formerly called Child Profile) remains a highly positive force for improving immunization rates. About 96% of all vaccination providers in the state participate in the registry, which now contains 5.9 million active patient records and 57 million immunizations.

Comprehensive Diabetes Care

HCA requires the MCOs to report nine indicators of comprehensive diabetes care, as defined below. NCQA introduced a new indicator of blood pressure control <140/80 mm Hg in 2011, and the MCOs reported this new indicator to HCA for the second year in 2012.

Measure definition

This measure assesses the percentage of enrollees with diabetes (type 1 or type 2), ages 18–75, who were continuously enrolled during the measurement year and who had:

- Hemoglobin A1c (HbA1c) level tested
- poor control of HbA1c levels (HbA1c > 9.0% or no HbA1c test)
- good control of HbA1c levels (HbA1c < 8.0%)
- lipid profile (LDL-C screening) performed during the measurement year
- LDL-C levels controlled (<100 mg/dL)
- dilated retinal exam during, or prior to, the measurement year*
- monitoring for nephropathy (kidney disease) through screening for microalbuminuria, medical attention for nephropathy, a visit to a nephrologist, a positive macroalbuminuria test, or evidence of ACE inhibitor/ARB therapy
- blood pressure control (<140/90 mm Hg) for the most recent blood pressure reading
- blood pressure control (<140/80 mm Hg) for the most recent blood pressure reading

Data collection method: Administrative or hybrid

*Dilated retinal exams performed prior to the measurement year must meet the following criteria for inclusion:
- the dilated retinal exam had a negative outcome (no evidence of retinopathy)
- the enrollee was not prescribed or dispensed insulin during the measurement year

MCO-level data analysis

Figures 17–25 show the 2011–2012 trends by MCO for diabetes care indicators.

As with the childhood immunization indicators, the MCOs reported few significant changes in diabetes care indicators in 2012. Statewide averages remained unchanged from 2011, except that the average rate of delivering dilated retinal exams plunged below 50%, a significant decline from 2011. For the two blood-pressure control indicators, the 2012 statewide averages were significantly higher than the NCQA national averages. However, as a group, the Healthy Options MCOs significantly underperformed the nation on all other indicators except HbA1c testing.

Acumentra Health conducted five-year trend analysis of comprehensive diabetes care indicators to identify significant trends. The analysis revealed a significant improvement in the statewide rate of monitoring for diabetic nephropathy since 2008. During the same period, however, the percentage of enrollees with poor control of their HbA1c levels also rose significantly.

Five-year performance trends for certain MCOs are highlighted in the following discussion of individual diabetes care indicators.

Annual HbA1c test

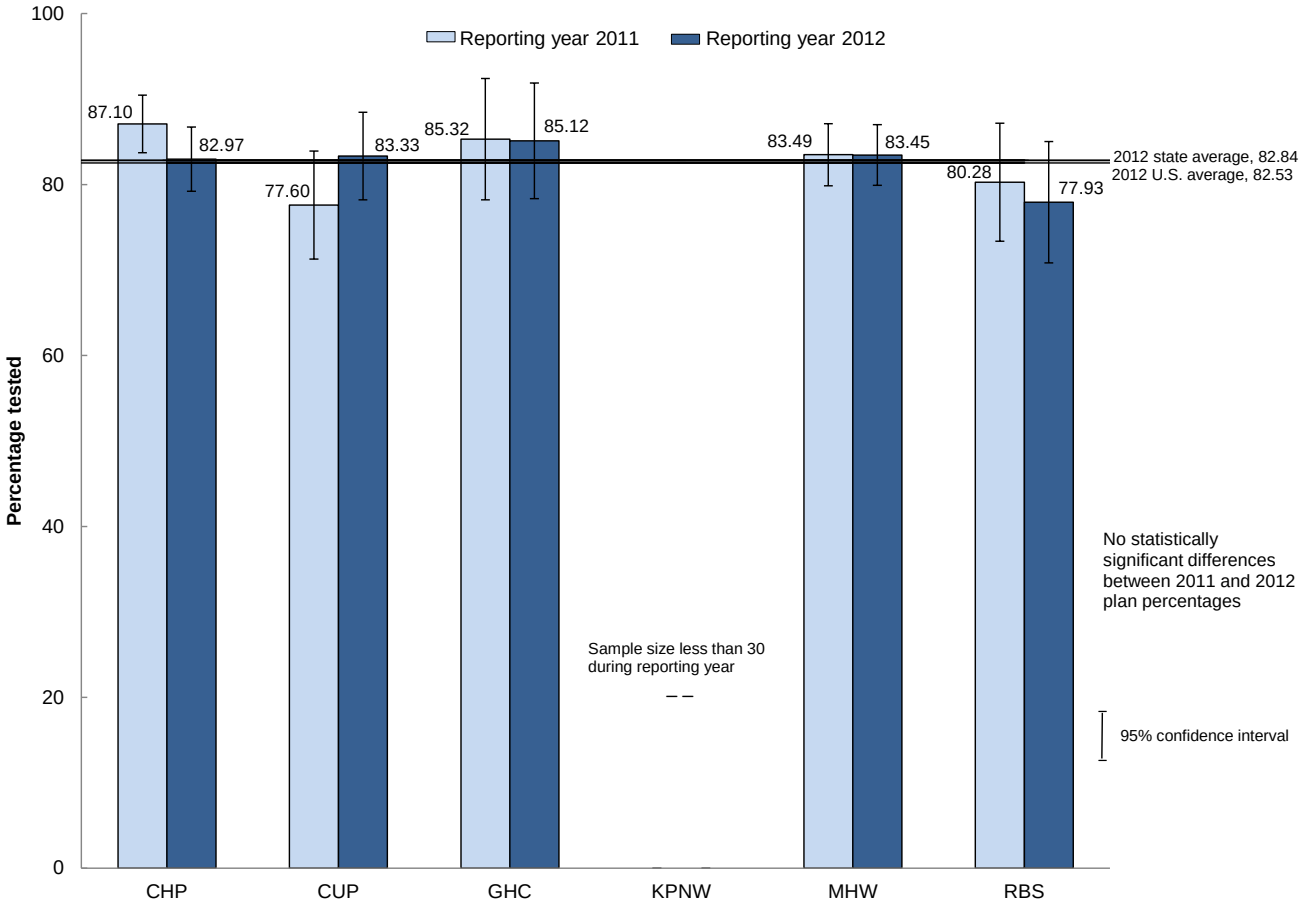


Figure 17. Annual HbA1c tests by health plan, reporting years 2011–2012.

Poor HbA1c control (> 9.0%)
Good HbA1c control (< 8.0%)

HbA1c control levels (Figures 18 and 19) varied widely among MCOs in 2012, as was the case in 2011. No significant changes occurred for either indicator. As shown, about 70% of RBS enrollees had poor control of HbA1c levels—significantly higher (i.e., worse) than the statewide average—while only about 39% of GHC's enrollees had poor control.

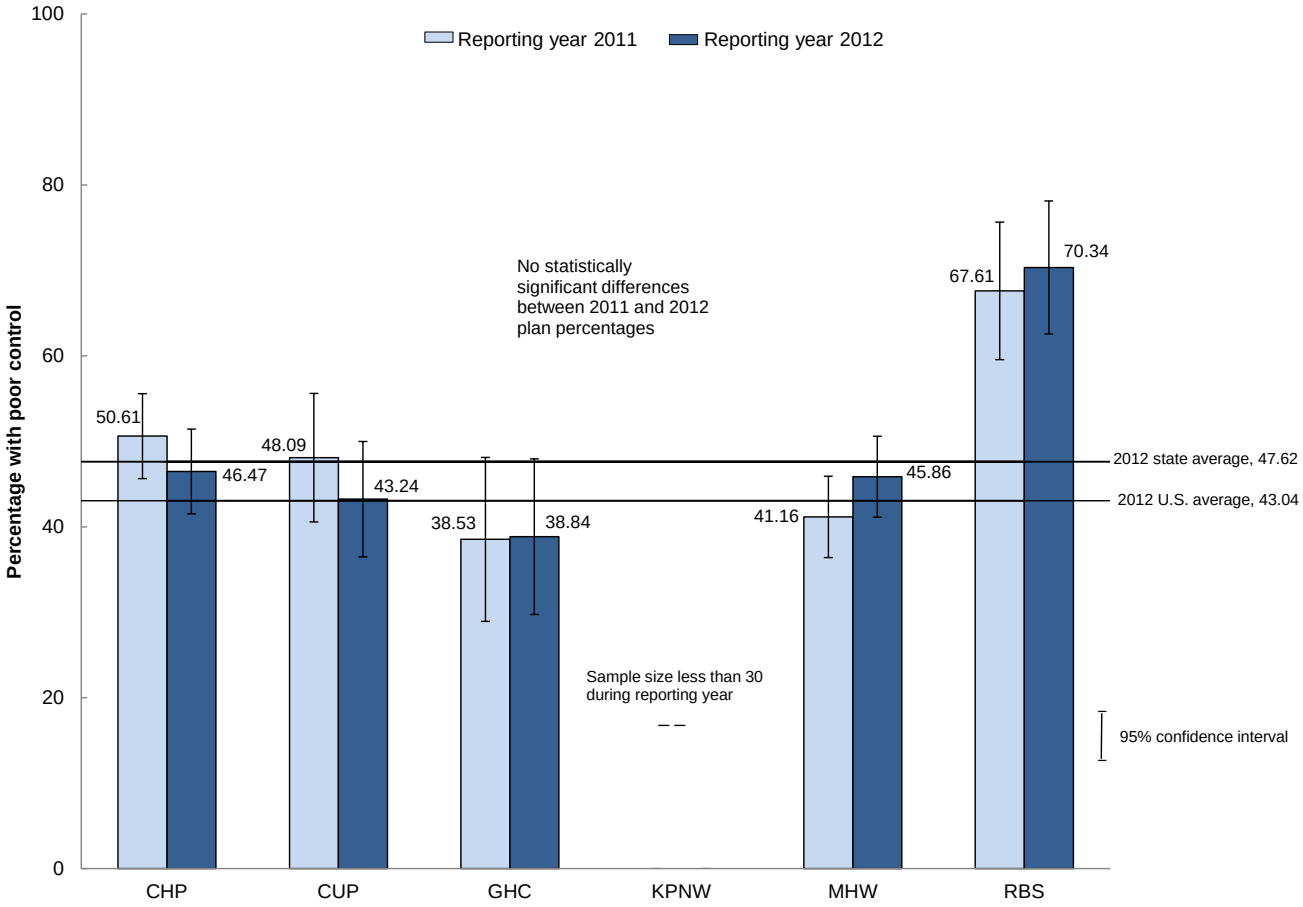


Figure 18. Enrollees with poor control of HbA1c levels by health plan, reporting years 2011–2012.

As noted previously, five-year trend tests show a significant rise in the statewide percentage of enrollees with poor HbA1c control. In 2008, 43.85% of all enrollees had poor control, versus 47.62% in 2012. Among MCOs, the percentage increased significantly for RBS enrollees, from 49.26% to 70.34%, with much of that increase occurring in the past two years.

Only about 25% of RBS enrollees had good control of their HbA1c levels, significantly below the statewide average, while GHC enrollees were significantly above average at 53.72%.

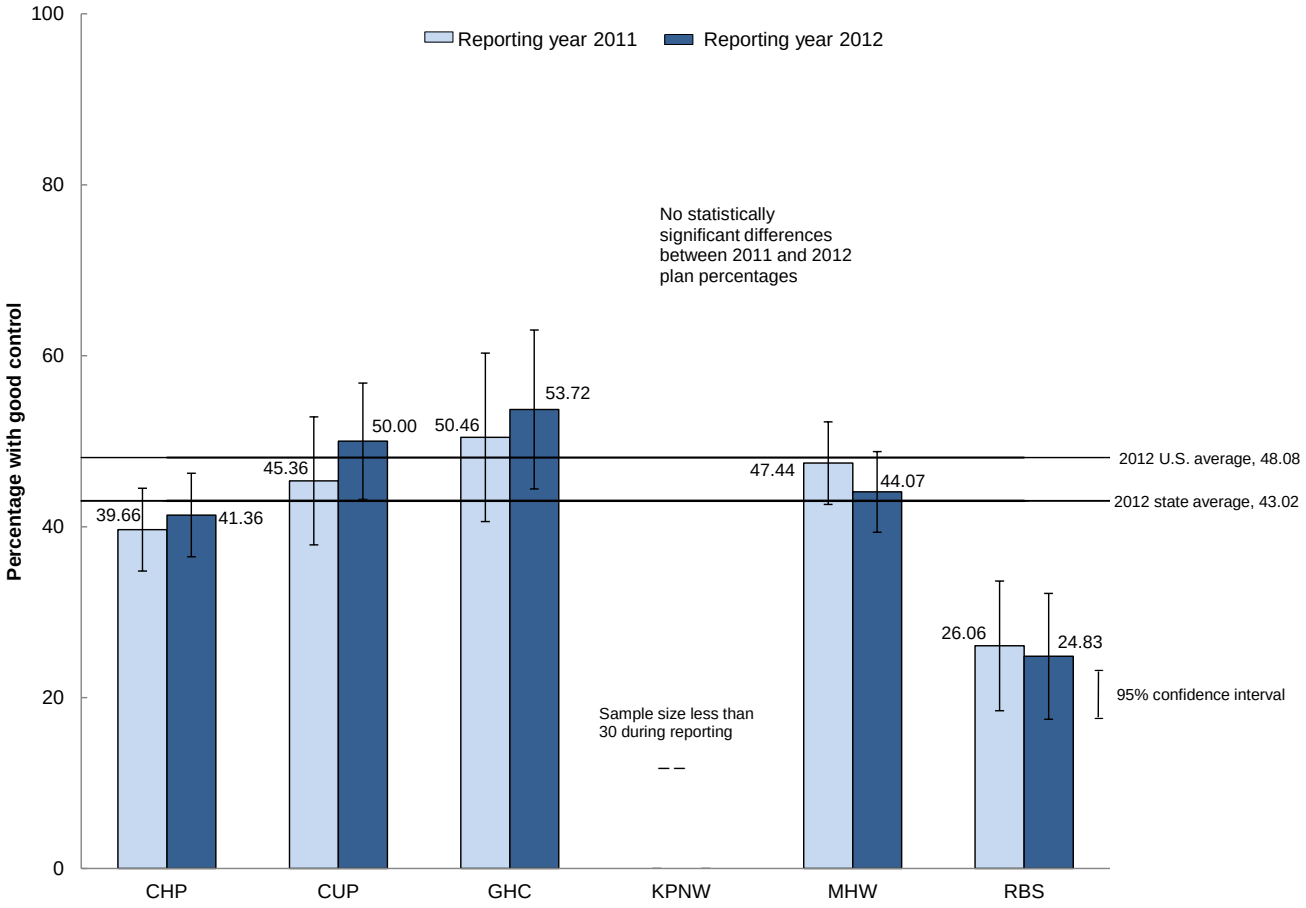


Figure 19. Enrollees with good control of HbA1c levels by health plan, reporting years 2011–2012.

Eye exam

All MCOs delivered dilated retinal exams at a lower rate in 2012, and all reported significant declines except for RBS. Before this year, the Washington MCOs had outperformed the national Medicaid average for this indicator by a significant margin.

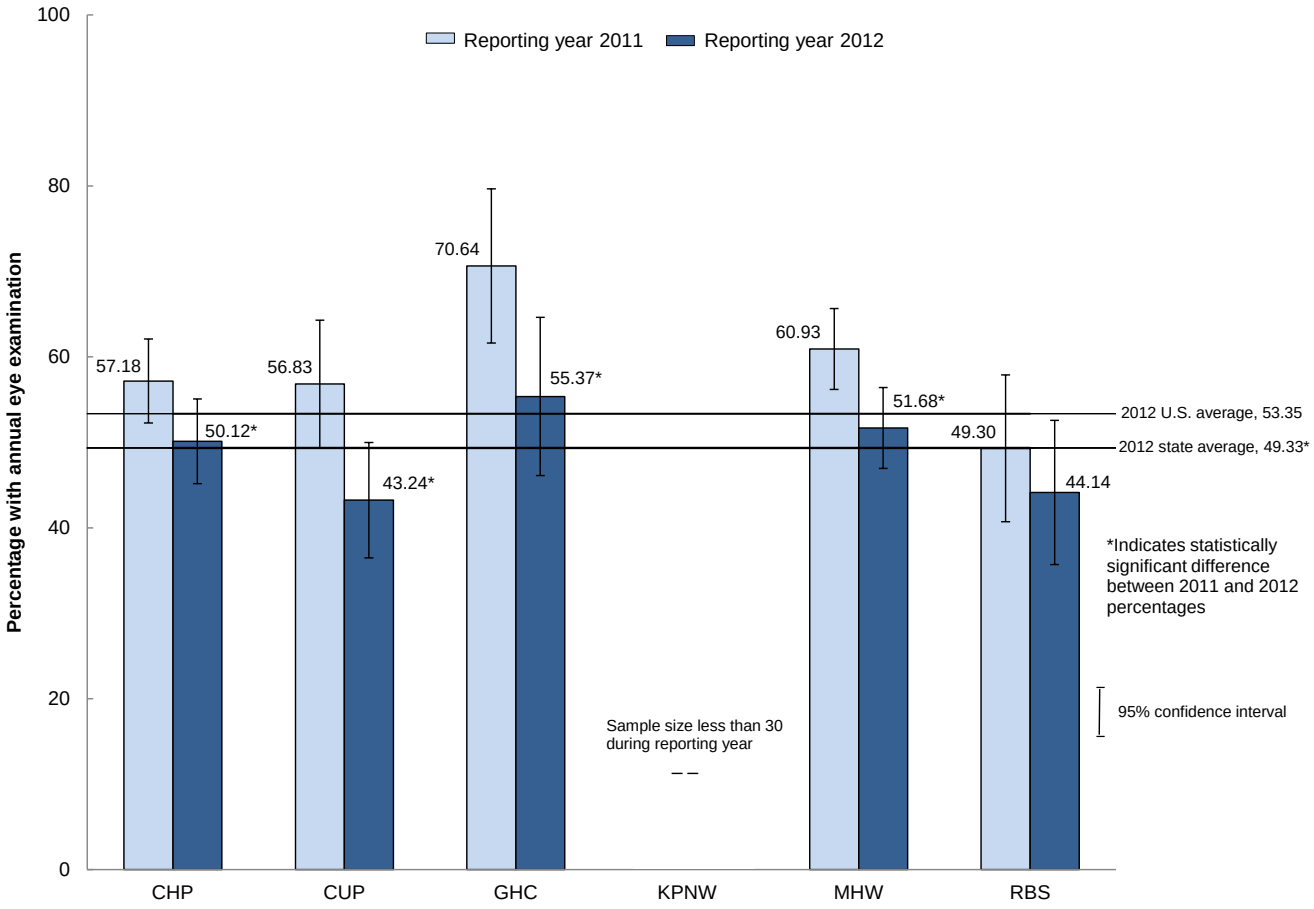


Figure 20. Dilated retinal exams by health plan, reporting years 2011–2012.

Five-year trend tests identified a significant statewide change in this indicator, from 54.82% in 2008 to the current 49.33%. However, the statewide rate had trended upward each year until the sharp decline in 2012, making it hard to conclude whether the overall trend is up or down. Among MCOs, CUP's rate shows a significant decline from 65.38% in 2008 to 43.24% in 2012, but with large fluctuations in interim years.

LDL-C screening

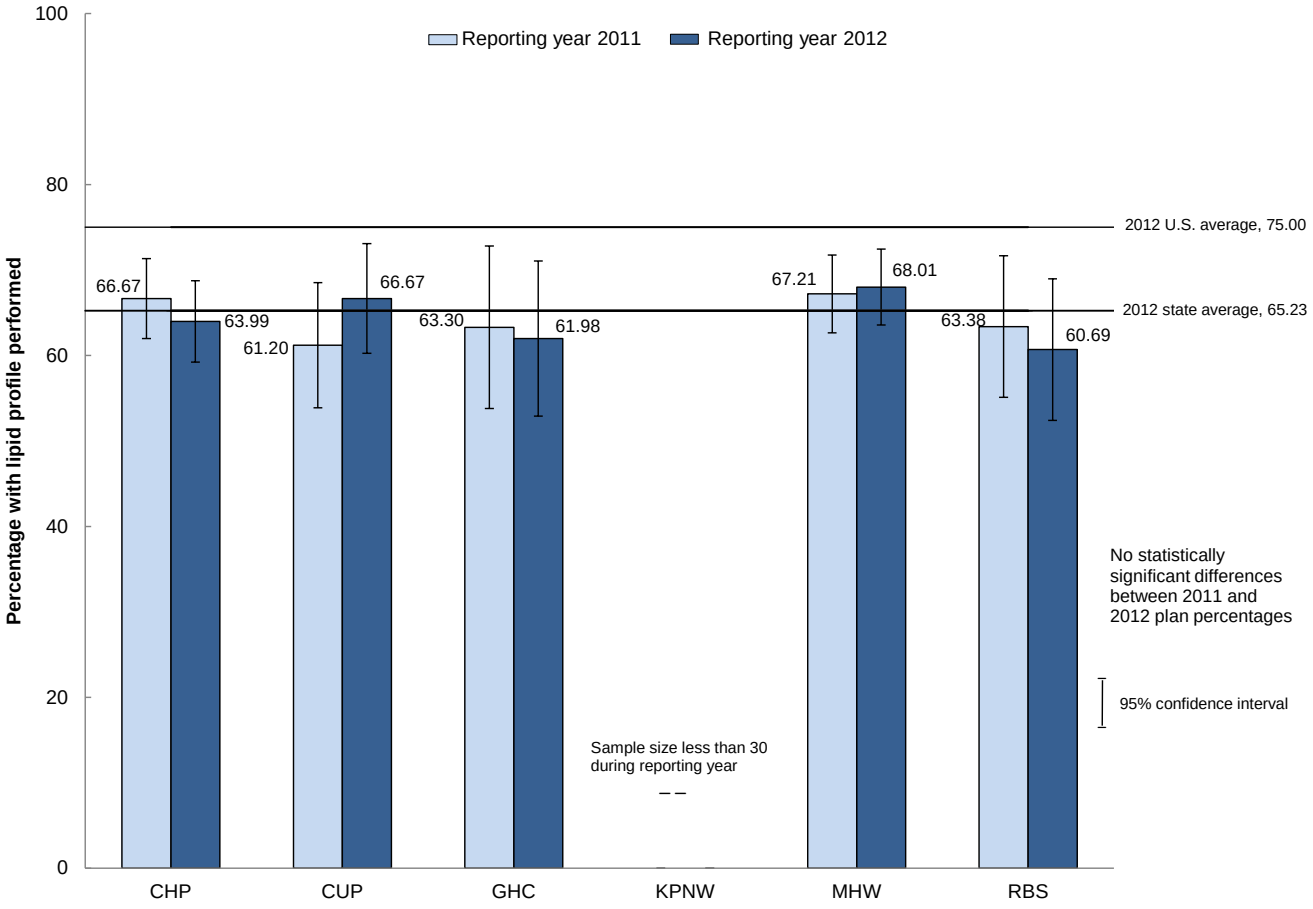


Figure 21. Lipid profile (LDL-C screening) performed by health plan, reporting years 2011–2012.

Five-year trend analysis revealed no significant statewide change in this indicator since 2008. However, among MCOs, GHC registered a significant decline from 70.69% in 2008 to the current 61.98%.

LDL-C level <100 mg/dL

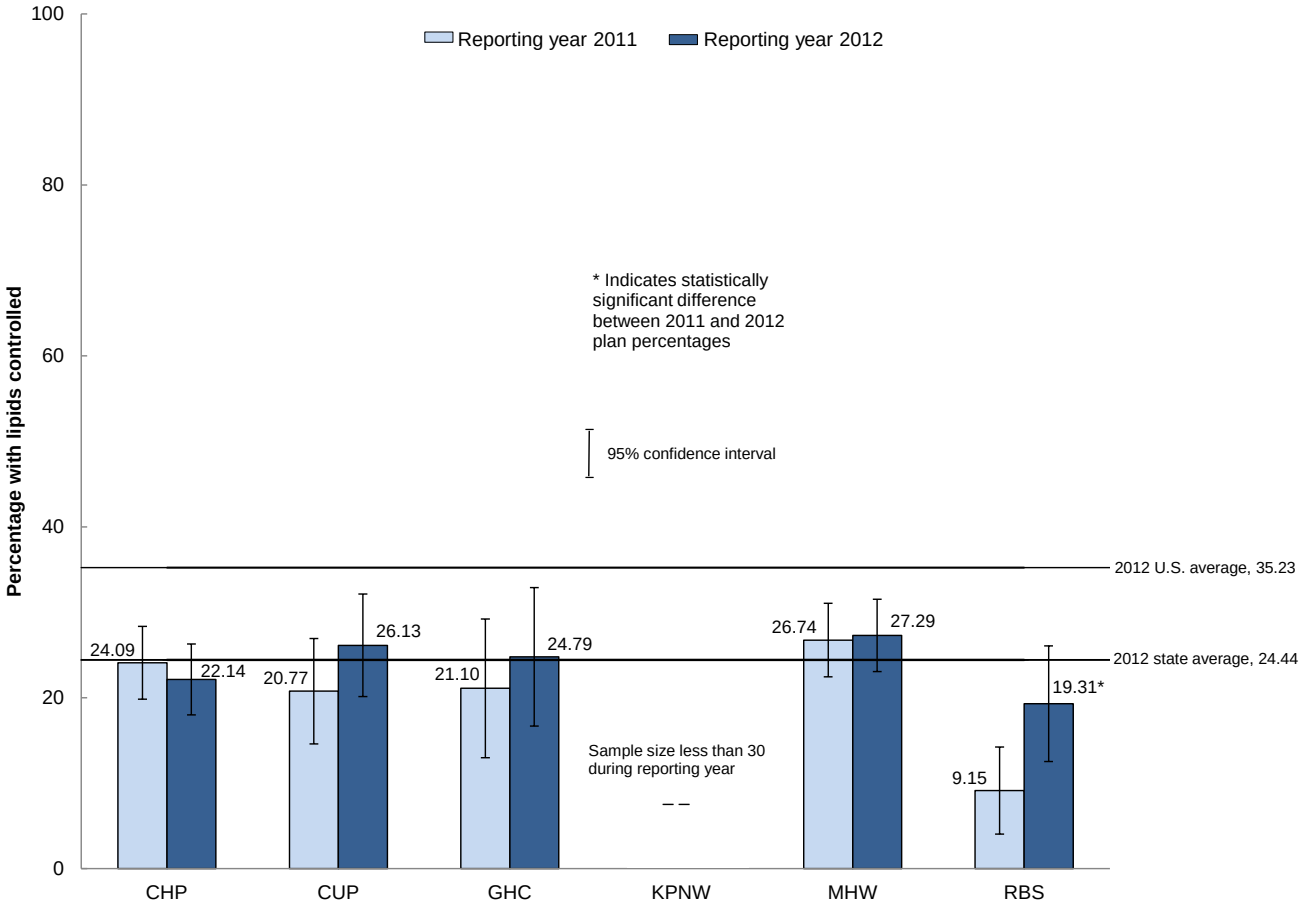


Figure 22. Lipids controlled (<100mg/dL) by health plan, reporting years 2011–2012.

Monitoring for diabetic nephropathy

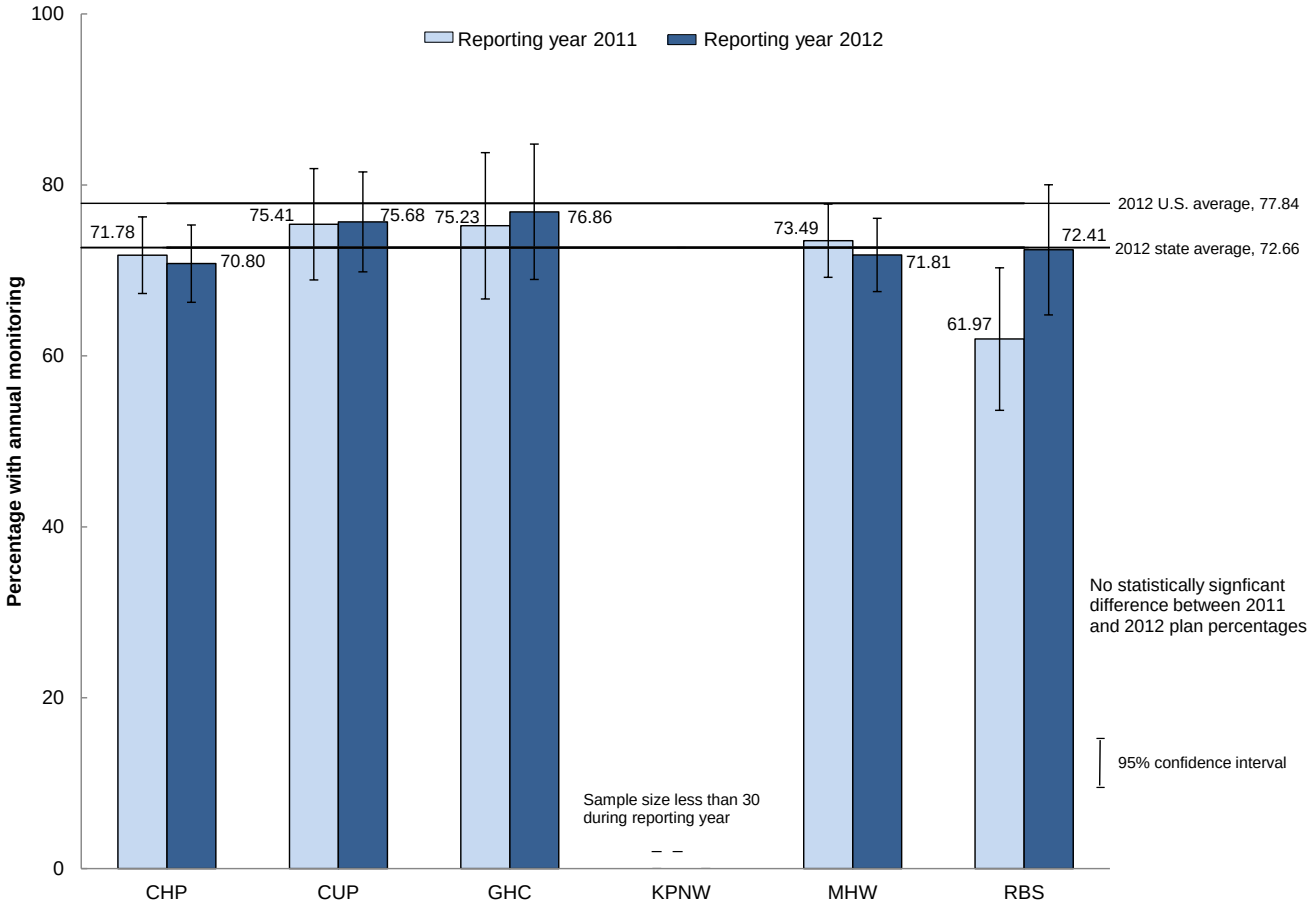


Figure 23. Nephropathy monitored annually by health plan, reporting years 2011–2012.

Five-year trend tests show a significant improvement in the statewide average for this indicator, from 68.52% in 2008 to the current 72.66%. Among MCOs, MHW's performance improved significantly from 67.38% in 2008 to 71.81% this year.

Blood pressure control (<140/90 mm Hg)

The Washington MCOs as a group continue to outperform the U.S. Medicaid average for this indicator, though the individual MCO results for 2012 varied substantially.

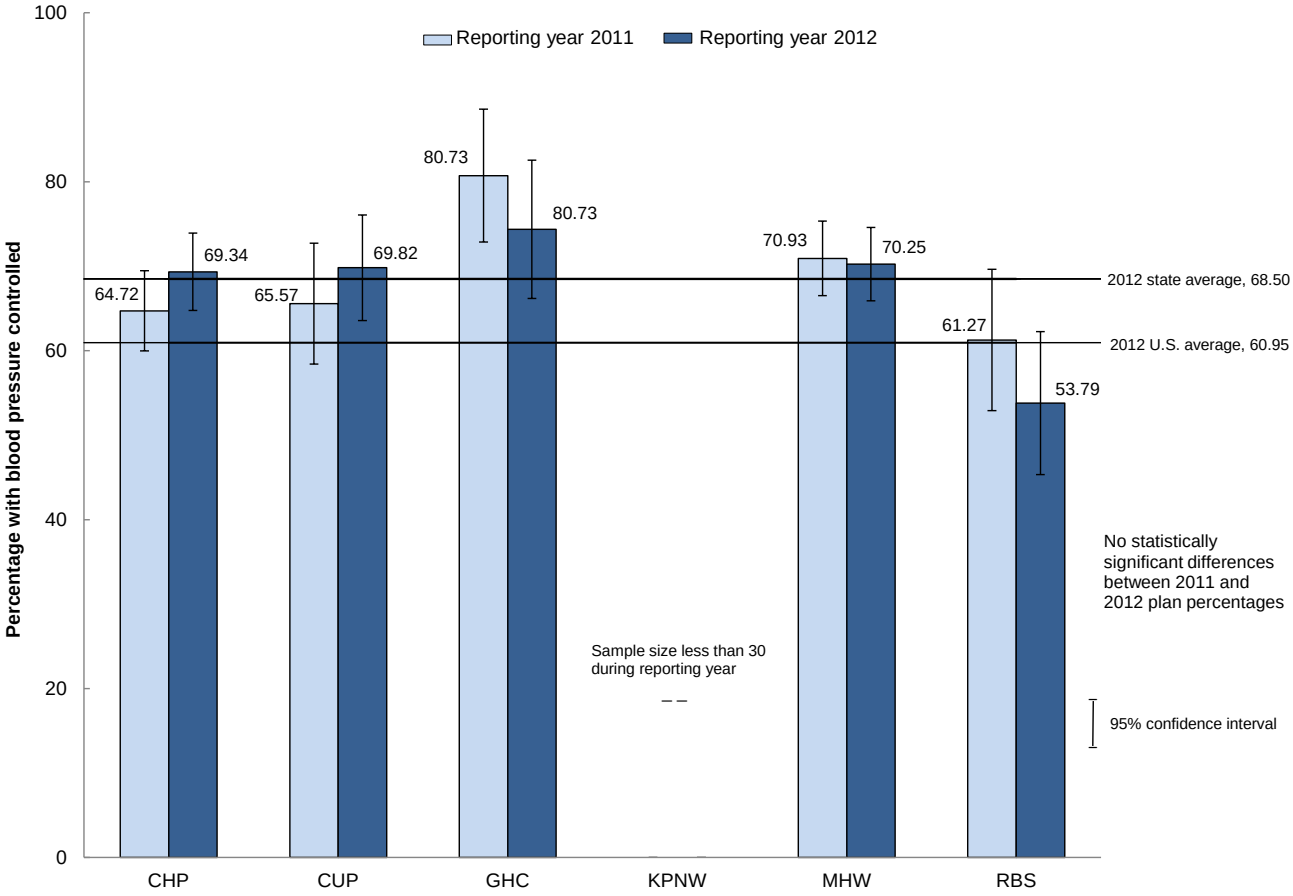


Figure 24. Blood pressure controlled (<140/90 mm Hg) by health plan, reporting years 2011–2012.

The statewide average for this indicator has not changed significantly over the past five years, though RBS registered a significant decline from 67.65% in 2008 to the current 53.79%.

Blood pressure control (<140/80 mm Hg)

Figure 25 shows the first two years of data by MCO for this indicator. On average, 43.54% of Washington MCO enrollees had their blood pressure controlled at this level, exceeding the NCQA national average. The 2012 rates for individual MCOs reflected insignificant changes from the first-year results in 2011.

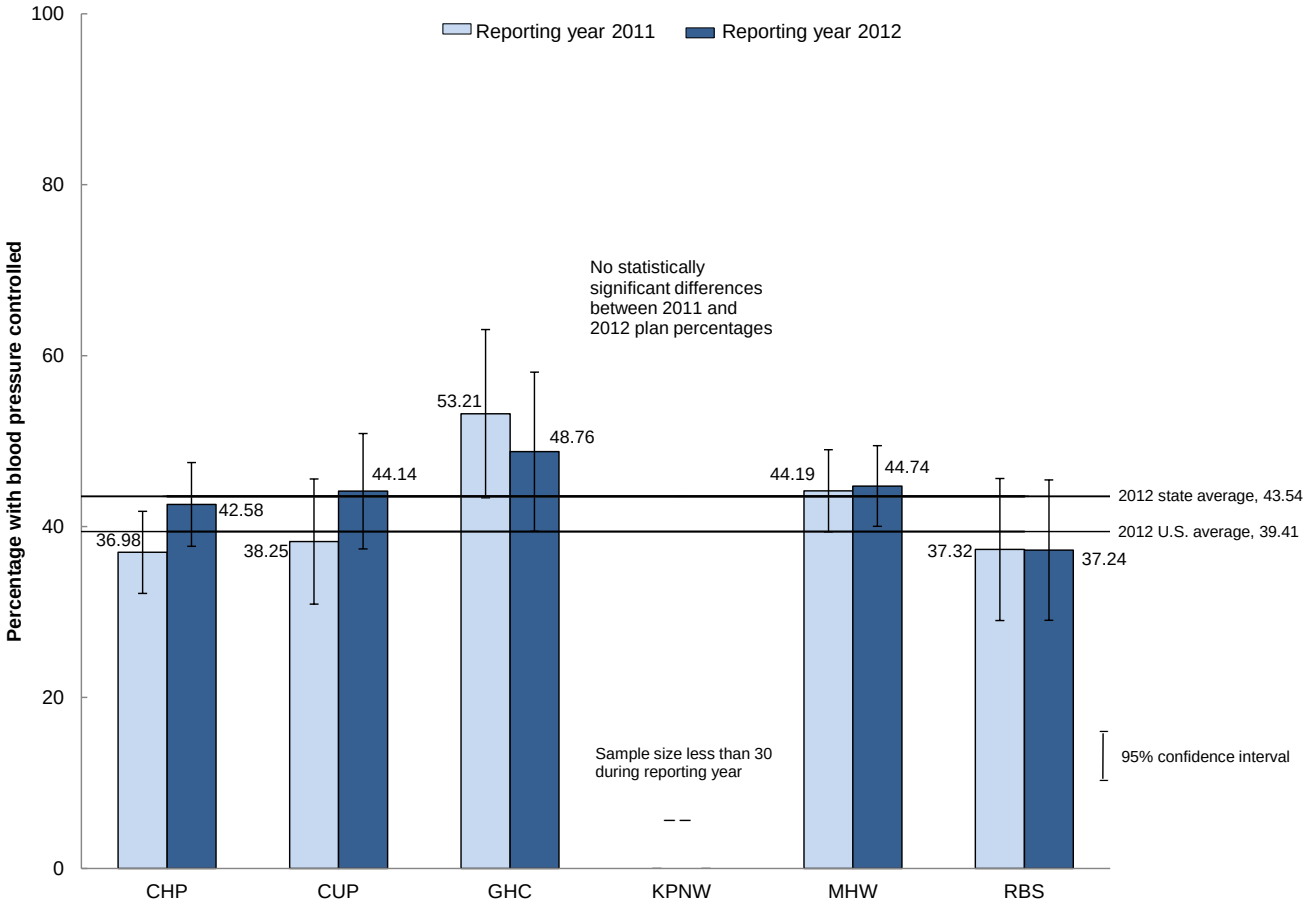


Figure 25. Blood pressure controlled (<140/80 mm Hg) by health plan, reporting years 2011–2012.

Discussion

Although performance rates for the diabetes care indicators fluctuated up or down among the MCOs in 2012, the only significant change from 2011 in the aggregate was a significant decline in delivery of dilated retinal exams. The MCOs significantly underperformed the national Medicaid averages on six of the nine indicators. Fewer than half of Washington enrollees with diabetes have good control of their blood-sugar levels, and fewer than one-quarter of enrollees have their lipids controlled at healthy levels. More positively, a significantly higher percentage of enrollees have their blood pressure controlled at good levels, compared with Medicaid enrollees nationally.

MCO performance on these measures tended to fluctuate within a relatively narrow range in 2012, but RBS significantly underperformed the other MCOs on three of the nine indicators.

Five-year trend analysis revealed a significant improvement in the statewide rate of nephropathy monitoring and a significant increase in the percentage of enrollees with poor HbA1c control (a negative trend). The sharp decline in the delivery of eye exams in 2012 left the statewide average for that indicator significantly below the 2008 average.

The HEDIS results point to large performance gaps among the MCOs, but some of this variability may reflect disparate levels of data completeness for various indicators, limiting the ability to make valid comparisons among health plans. Individual MCOs need to conduct drill-down analyses of patient-level data, and review their systems for recording and collecting data used to report performance measures, to determine whether their reported rates reflect actual performance or data completeness.

Postpartum Care

Measure definition

This measure combines timely initiation of prenatal care with a postpartum visit for female enrollees who delivered a live birth between November 6 of the year prior to the measurement year and November 5 of the measurement year. Enrollees had to be continuously enrolled at least 43 days prior to delivery and 56 days after delivery. For these women, the measure assesses the percentage who had a postpartum visit on or between 21 days and 56 days following delivery.

Data collection method: Administrative or hybrid

Figure 26 shows the 2011–2012 trends by health plan for delivery of timely postpartum care. The 2012 statewide average for this measure, 62.99%, did not differ significantly from the national Medicaid average. GHC once again significantly exceeded the statewide average, as did MHW, while RBS performed significantly below average, with a significant drop from 2011.

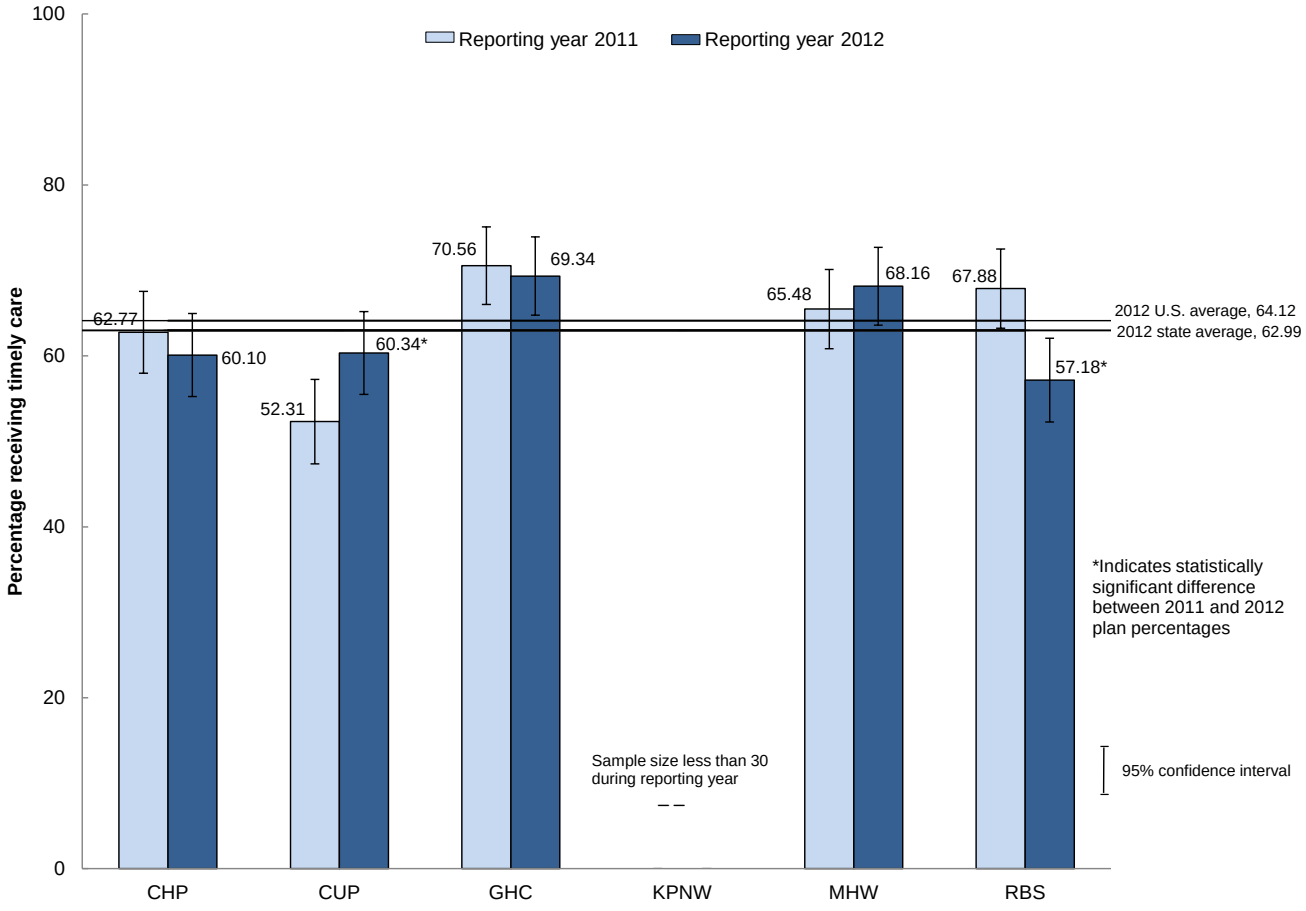


Figure 26. Timely postpartum care by health plan, reporting years 2011–2012.

Discussion

The statewide performance on this measure has remained static for 10 years, while the U.S. average has improved from 51.70% in 2002 to the current 64.12%.

As noted in previous reports, the HEDIS specifications pose challenges to health plans in capturing accurate data for this measure. The time frame for counting women in the numerator may result in underreporting the number of women who actually receive this care.

Well-Child Care Visits

HCA requires the MCOs to report WCC visit rates for young Medicaid enrollees in three age brackets, as defined below. For the infant category, Acumentra Health breaks out rates according to the number of visits in the first 15 months, from 0 to 6+.

Measure definitions

HEDIS measures evaluate the success of health plans in providing well-child services by assessing the percentage of Medicaid children with the recommended number of

- well-child visits in the first 15 months of life: the percentage of enrolled children who turned 15 months old during the measurement year, were continuously enrolled in the plan from 31 days and received between zero and six or more well-child visits with a PCP in their first 15 months of life
- well-child visits in the 3rd, 4th, 5th, and 6th years of life: the percentage of enrolled children who were between three and six years old during the measurement year, were continuously enrolled for 12 months, and received one or more well-child visits with a PCP during the measurement year
- adolescent well-care visits: the percentage of enrolled adolescents ages 12–21 years during the measurement year who were continuously enrolled for 12 months and had at least one comprehensive well-care visit with a PCP or an obstetrics/gynecology practitioner during the measurement year

Data collection method: Administrative or hybrid

Five-year trends in WCC visits

Figure 27 shows the five-year statewide trends for WCC visits for infants, children, and adolescents. Average visit rates for infants have fluctuated considerably since 2008, while visit rates for children and adolescents have shown gradual improvement. The statewide averages for all three indicators remain significantly below the national averages.

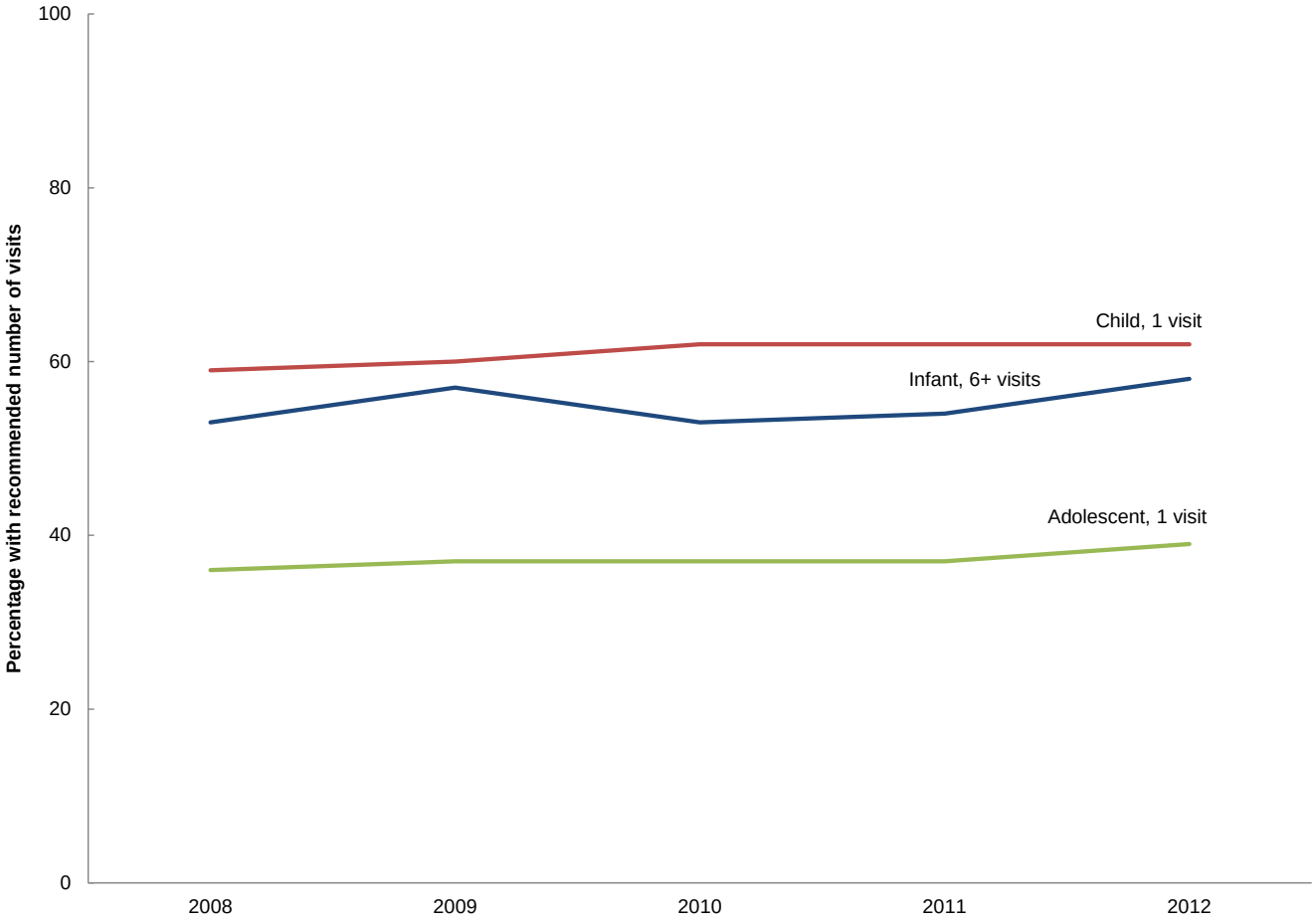


Figure 27. State averages for recommended WCC visits for infants, children, and adolescents, reporting years 2008–2012.

MCO-level data analysis

Well-child care in the first 15 months of life

In 2012, the statewide average rate for infants with six or more WCC visits (58.09%) showed a significant increase from 2011. Among MCOs, CUP and RBS reported significant gains.

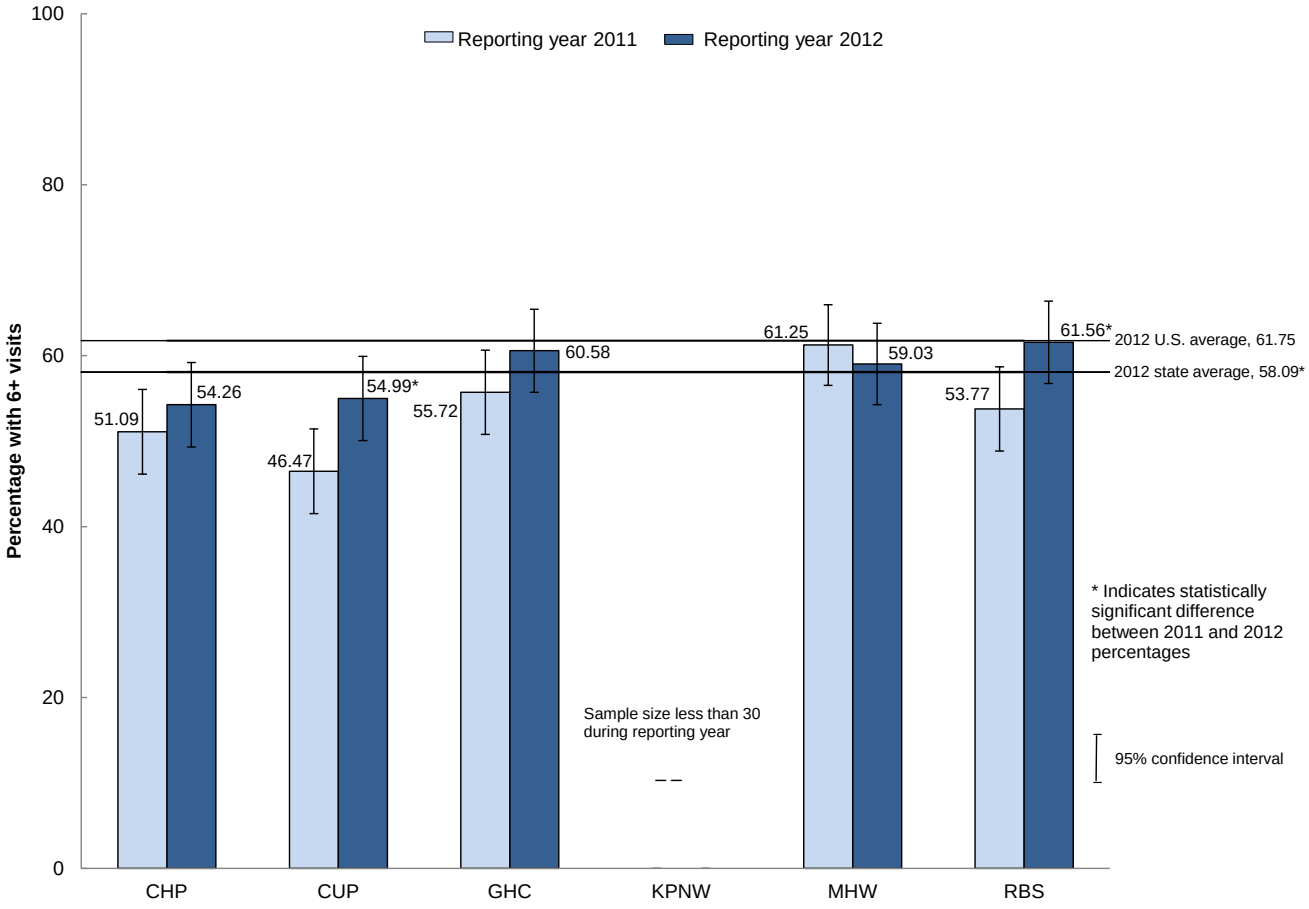


Figure 28. Six or more well-child visits in the first 15 months of life by health plan, reporting years 2011–2012.

Well-child care for children in the 3rd, 4th, 5th, and 6th years of life

The 2012 statewide average visit rate for this age group, 62.38%, was marginally higher than the 2011 rate. No MCO reported a significant change in 2012, though KPNW, at 83.33%, significantly outperformed the statewide average.

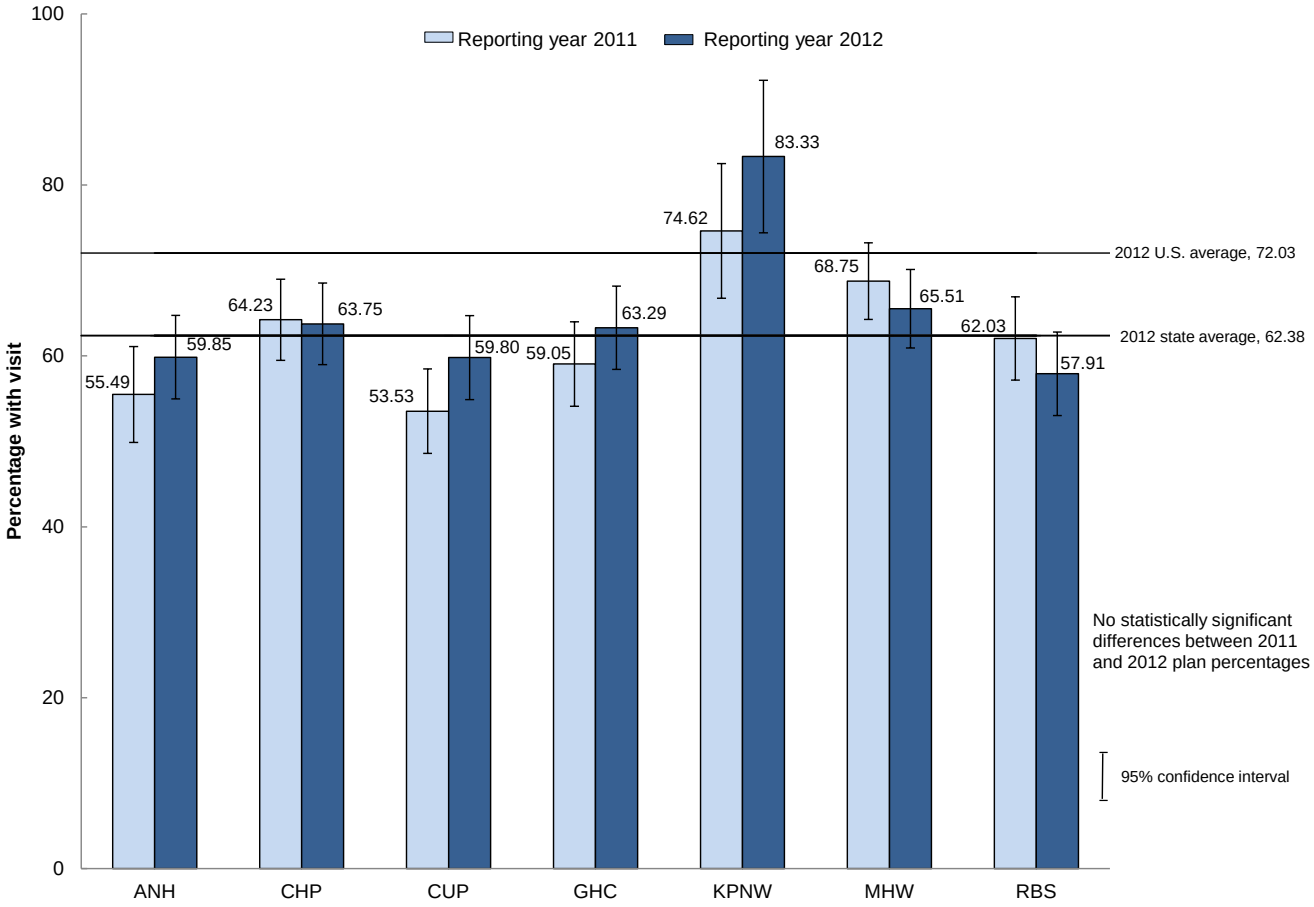


Figure 29. Well-child visits in the 3rd, 4th, 5th, and 6th years of life by health plan, reporting years 2011–2012.

Adolescent well-child care

The statewide average visit rate for adolescents increased significantly in 2012, to 39.25%, still significantly below the U.S. average. Only KPNW reported a significant change from 2011. GHC and MHW significantly exceeded the 2012 statewide average, while ANH and CUP were significantly below average.

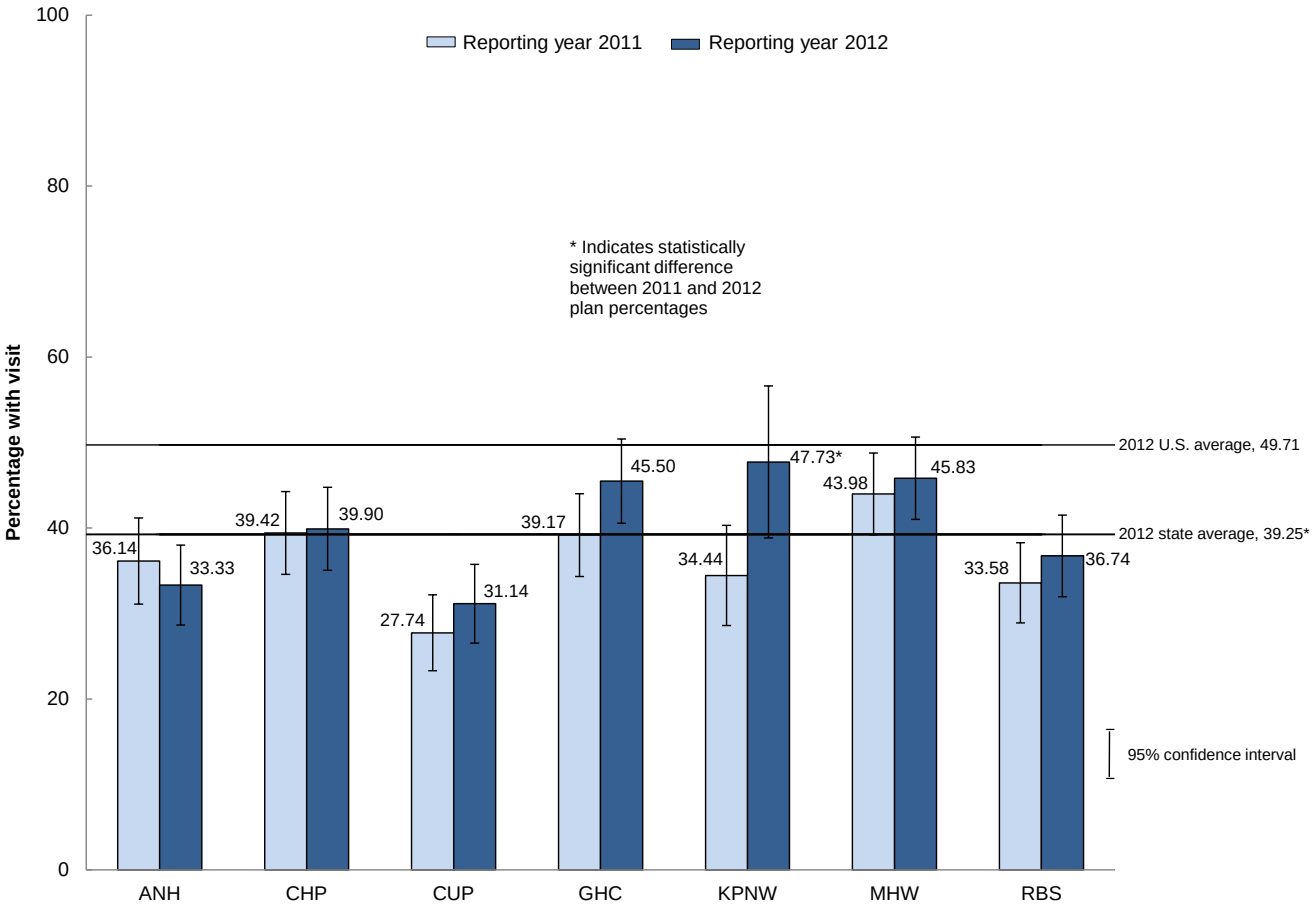


Figure 30. Adolescents ages 12–21 with one or more well-care visits by health plan, reporting years 2011–2012.

Member-level data analysis

HCA required the MCOs to submit de-identified member-level data on WCC visits. Acumentra Health received enough data in 2012 to analyze differences in performance by HCA region, gender, primary language, and race/ethnicity. Highlights are reported below.

Region	Counties
1	Adams, Asotin, Benton, Chelan, Columbia, Douglas, Ferry, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Okanogan, Pend Oreille, Spokane, Stevens, Whitman, Walla Walla, Yakima
2	Island, King, San Juan, Skagit, Snohomish, Whatcom
3	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Kitsap, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum

Rates by region:

- In 2012, the average rate of WCC visits for adolescents was significantly higher in Region 2 (at 44%) than in other regions.
- Regional rates for infants and children moved closer together in 2012, showing no significant differences. Infant WCC visit rates ranged from 55% in Region 1 to 60% in Region 2, while rates for children aged 3–6 ranged from 60% in Region 1 to 65% in Region 2.

Rates by primary language:

- In 2012, as in 2011, WCC visit rates for infants were significantly higher among English-speaking enrollees (58%) than among Russian- and Spanish-speaking enrollees.
- Visit rates for adolescents were significantly lower among Russian speakers (28%) than among the other language groups. However, the visit rate for Russian-speaking children aged 3–6 increased significantly in 2012, to 63%, about the same as the rate for English-speaking children.
- The infant WCC visit rate for the Spanish-speaking group also rose significantly from 2011, reaching 49%.

Rates by race/ethnicity:

- As in 2011, statistical tests found no differences in WCC visit rates among racial groups in 2012. However, the visit rate for White children aged 3–6 and for White adolescents improved significantly from 2011, reaching 63% and 40%, respectively.
- In 2012, WCC visit rates for Hispanic children were not significantly different from the rates for non-Hispanic children, in contrast to the 2011 results. However, the infant WCC visit rate for Hispanic enrollees improved significantly in 2012, to 54%.

Rates by urban/rural residence:

- In 2012, as in 2011, there were no significant differences in WCC visit rates between urban and rural enrollees in any age group.

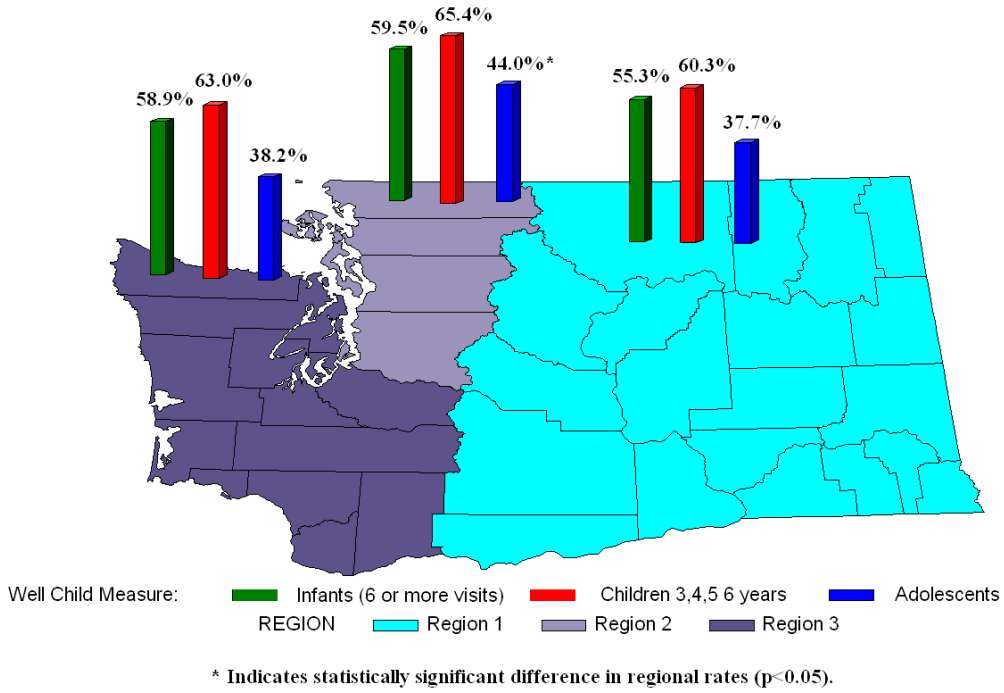


Figure 31. WCC visit rates by region, reporting year 2012.

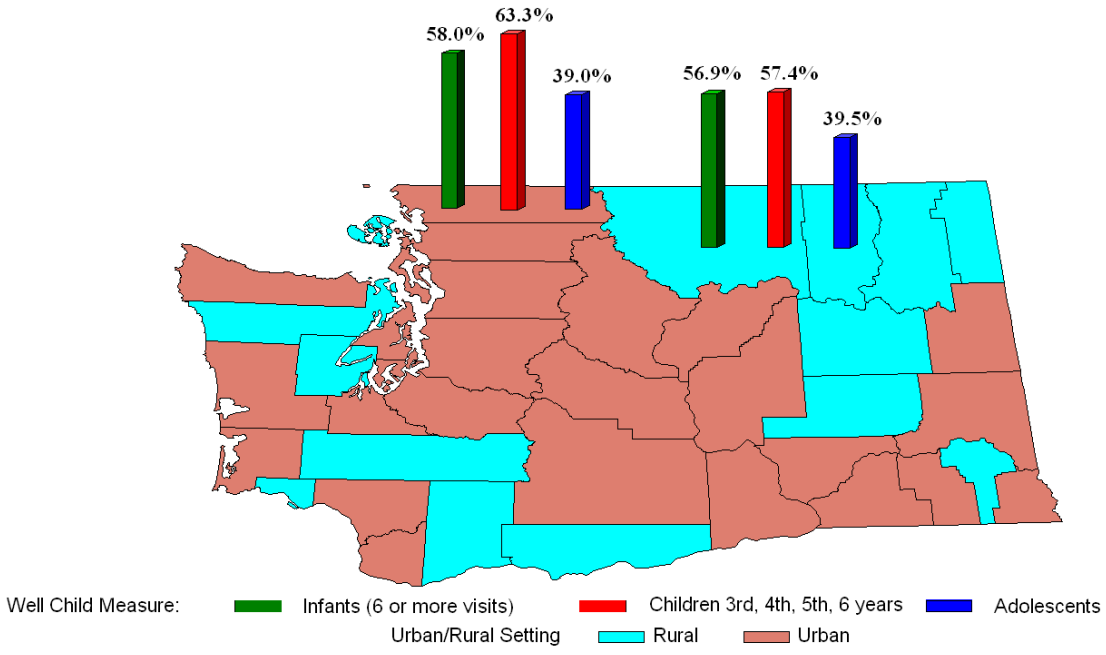


Figure 32. WCC visit rates by region, reporting year 2012.

Discussion

Though the most recent results show some improvement, the Washington MCOs continue to lag behind the national Medicaid performance in providing WCC visits, particularly for older children and adolescents. In 2012, CUP and RBS reported significant improvement in visit rates for infants, and KPNW significantly increased the visit rate for adolescents.

Member-level data analysis again showed the highest WCC visit rates occurring in Region 2, though the differences with other regions were not significant except in the adolescent age group. Infants of English-speaking families again had a significantly higher visit rate than those in other language groups, while visit rates for adolescents were significantly lower among Russian speakers than among the other groups. Unlike in 2011, WCC visit rates for Hispanic children in 2012 were not significantly different from the rates for non-Hispanic children. Statistical tests continued to show no significant differences between genders, between urban and rural enrollees, or among racial groups.

The Washington MCOs continue to conduct multi-year PIPs aimed at improving WCC visit rates, as required by contract. Previously, TeaMonitor has cited best-practice interventions that include:

- CHP's quarterly feedback reports, incentives, and technical assistance for providers
- KPNW's web-based Panel Support Tool (PST) for providers, which graphically displays "care gaps" and compares practitioner's performance on an intranet website
- GHC's implementation of a PST to identify care gaps and remind providers about necessary well-child care

In its 2012 reports, TeaMonitor suggested that the MCOs need to refresh their interventions to sustain improvements on the WCC measures.

Reliance on medical chart data to complete the data collection remains an issue for most MCOs. Chart abstraction is expensive, and chart reviewers often face challenges interpreting elements of the well-child exam such as anticipatory guidance. In an effort to reduce the cost of hybrid data collection, some states, like New York, are moving to the use of administrative-only rates for the WCC measures. In 2011, to support data completeness, HCA supplied the MCOs with enhancement files containing any fee-for-service preventive health claims paid outside of the plan to help enhance the plans' administrative data sets.

Emergency Room Visits

In 2012, Medicaid managed care enrollees in Washington averaged 49.50 ER visits per 1000 member months (see Figure 33). The average visit rate fell significantly for the second straight year, remaining significantly below the U.S. Medicaid average, as has been the case since 2006.

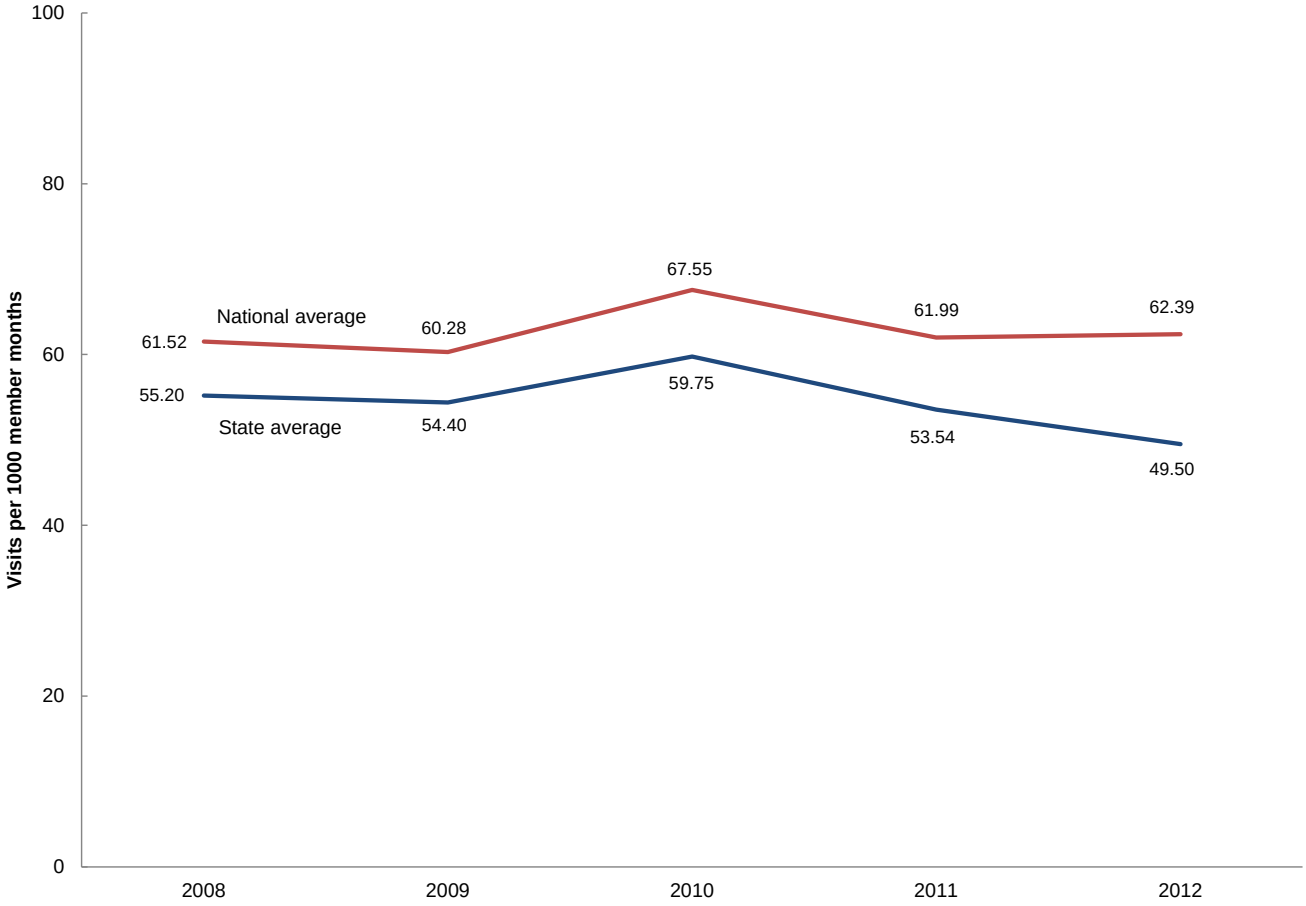


Figure 33. State and national averages for emergency room utilization, reporting years 2008–2012.

As shown in Figure 34 on the next page, all but two MCOs (CUP and KPNW) reported significantly lower ER visit rates in 2012 than in 2011. Visit rates among plans once again varied widely, ranging from 33.24 (GHC) to 59.93 (RBS) visits per 1000 member months.

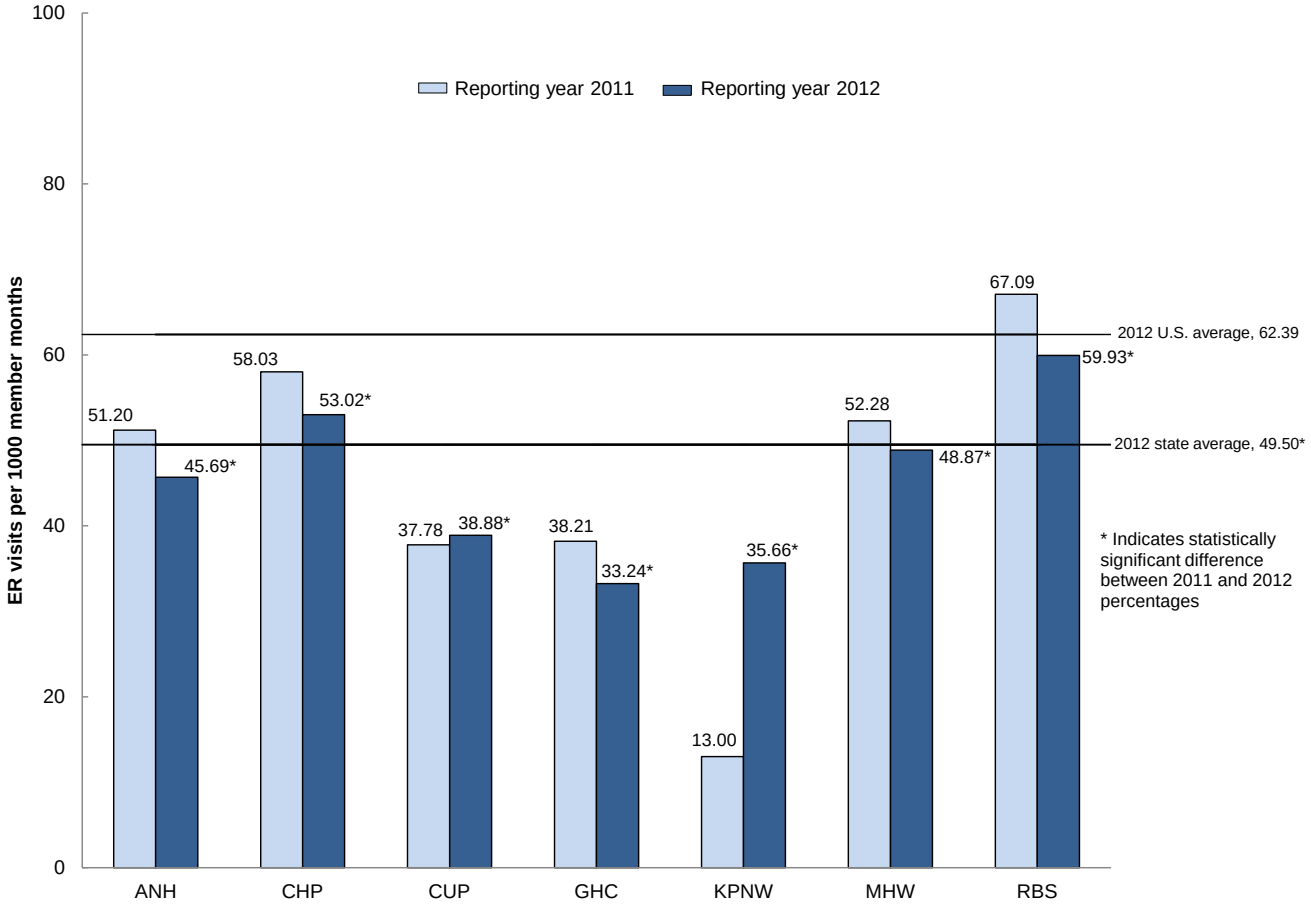


Figure 34. Emergency room visits per 1000 member months by health plan, reporting years 2011–2012.

Discussion

HCA has noted that a relatively small number of clients are responsible for a preponderance of ER visits, many for conditions that would be treated more appropriately in primary care. The 2012 supplemental budget legislation suspended the state's previously authorized policy of not paying for medically unnecessary ER visits. Instead, the law directed HCA to work with the state hospital association and emergency physicians to instill best practices aimed at reducing non-emergency use of the ER and overutilization of emergency services. The new plan depends on establishing procedures and systems to refer non-emergency patients to primary care providers (PCPs) and to educate all enrollees about appropriate use of the ER.[8]

As part of a 2010 legislative mandate to design a system of hospital quality incentive payments, HCA developed improvement measures that include reducing preventable ER visits by Medicaid enrollees. Hospitals have planned to address that measure through community partnerships, data reporting, follow-up with ER patients, and continuing education for hospital team members. Qualifying hospitals began receiving incentive payments on July 1, 2012.

Race/Ethnicity Diversity of Health Plan Membership

This is the fourth year that HCA has required the MCOs to report this HEDIS measure as a method to identify characteristics of the Medicaid enrollees served by the plans. The measure reports an unduplicated count and percentage of members enrolled at any time during the measurement year, by race and ethnicity. Historically, some MCOs experienced difficulty in identifying race and ethnicity for members. If an MCO cannot report this measure, HCA will assign a corrective action to the plan.

Tables B-57–B-63 in Appendix B present complete demographic data for each health plan. The data should be interpreted with caution because of the wide variation among plans in the consistency of the data reported, evident from Tables 2–4 below.

Table 2. Unduplicated membership and known race and ethnicity by health plan, reporting year 2012.

	ANH	CHP	CUP	GHC	KPNW	MHW	RBS	State
Membership	7,088	313,713	81,733	31,064	1,368	458,791	53,495	947,252
% with known race	29.47	54.90	58.12	76.76	57.46	59.82	16.19	55.91
% with known ethnicity	100.00	28.94	0.00	5.43	59.86	76.47	100.00	53.20

Table 3. Ethnicity of enrollees by health plan, reporting year 2012.

	Hispanic		Not Hispanic		Unknown		Totals	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
ANH	113	1.59	6,975	98.41	0	0.00	7,088	100.00
CHP	90,789	28.94	0	0.00	222,924	71.05	313,713	100.00
CUP	0	0.00	0	0.00	81,733	100.0	81,733	100.00
GHC	1,686	5.43	0	0.00	29,378	94.57	31,064	100.00
KPNW	50	3.65	769	56.21	540	39.47	1,368	100.00
MHW	76,404	16.65	274,458	59.82	107,929	23.52	458,791	100.00
RBS	4,002	7.48	49,493	92.52	0	0.00	53,495	100.00
State total	**173,044**	**18.26**	**331,695**	**35.01**	**442,504**	**46.71**	**947,252**	**100.00**

A primary reason for the gaps in reporting of race and ethnicity data is underreporting at the state level. These self-reported data are optional when new clients enroll in the state Medicaid program. The state could improve reporting at this level by requiring clients to provide this information at the time of enrollment. For 2011, NCQA revised the methodology for these measures, allowing health plans to augment the data in state enrollment files with data from additional sources such as enrollee surveys.

Table 4. Race of enrollees by health plan, reporting year 2012.

Race	ANH n (%)	CHP n (%)	CUP n (%)	GHC n (%)	KPNW n (%)	MHW n (%)	RBS n (%)	State n (%)
White	1,866 (26.33)	115,178 (36.71)	35,036 (42.87)	16,656 (53.62)	671 (49.05)	218,726 (47.67)	6,912 (12.92)	395,045 (41.70)
African American	65 (0.92)	16,491 (5.26)	1,652 (2.02)	3,256 (10.48)	37 (2.70)	30,581 (6.67)	399 (0.75)	52,481 (5.54)
American Indian	14 (0.20)	2,003 (0.64)	0 (0.00)	486 (1.56)	11 (0.80)	3,454 (0.75)	122 (0.23)	6,090 (0.64)
Asian	42 (0.59)	10,225 (3.26)	858 (1.05)	1,772 (5.70)	17 (1.24)	20,557 (4.48)	173 (0.32)	33,644 (3.55)
Native Hawaiian	0 (0.00)	6,308 (2.01)	795 (0.97)	96 (0.31)	11 (0.80)	1,140 (0.25)	0 (0.00)	8,350 (0.88)
Some other race	102 (1.44)	22,035 (7.02)	9,163 (11.21)	1,579 (5.08)	14 (1.02)	0 (0.00)	1,040 (1.94)	33,933 (3.58)
Two or more races	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	20 (1.46)	0 (0.00)	0 (0.00)	20 (0.01)
Unknown	4,999 (70.53)	141,473 (45.10)	34,229 (41.88)	7,219 (23.24)	582 (42.54)	184,333 (40.18)	44,836 (83.81)	417,671 (44.09)
Total	**7,088 (100)**	**313,713 (100)**	**81,733 (100)**	**31,064 (100)**	**1,368 (100)**	**458,791 (100)**	**53,495 (100)**	**947,252 (100)**

Discussion

Although most MCOs were able to report race and ethnicity data for their populations in 2012, ethnicity was categorized as "unknown" for 47% of enrollees statewide, and race was unknown for 44% of enrollees.

In 2012, GHC conducted what TeaMonitor called a best-practice PIP to improve collection of race and ethnicity data, using objective, measurable indicators, sound barrier analysis, and meaningful interventions. GHC used three collection processes with a hierarchical assignment to support the most accurate collection method. Self-report data from patients superseded state Medicaid self-report data, and the latter superseded "imputation" data.

The Health Research and Educational Trust (HRET) recommends best practices in collecting and reporting data on race, ethnicity, and primary language.[9] The organization's Disparities Toolkit offers a uniform framework for obtaining data directly from enrollees or their caregivers in an efficient, effective, and respectful manner. HRET recommends these specific practices:

- Information should always be provided by patients or their caretakers, never by observation alone.
- For health plans, data collection should take place at enrollment.
- Use U.S. Census or Office of Management and Budget racial and ethnic categories for reporting purposes.
- Store the data in a standard electronic format for easy linking to clinical data.
- Address patient concerns up front and clearly before obtaining information.
- Provide ongoing training and evaluation for health plan staff.

Washington Medicaid Integration Partnership (WMIP)

The WMIP seeks to integrate medical, mental health, substance abuse, and long-term care services for categorically needy aged, blind, and disabled Medicaid beneficiaries. These beneficiaries, who tend to have complex health conditions, are the fastest growing and most expensive segment of the Medicaid client base.

Intermediate goals of the WMIP include improving the use of mental health and substance abuse services, which account for a large portion of total healthcare costs. Longer-term objectives are to improve the patients' quality of life and independence, reduce ER visits, and reduce overall healthcare costs.

The state contracts with MHW to conduct the WMIP in Snohomish County. MHW is expected to

- provide intensive care coordination to help clients navigate the healthcare system
- involve clients in care planning
- assign each client to a care coordination team and have consulting nurses available on the phone 24 hours per day
- use the Chronic Care Model to link medical, pharmacy, and community services
- use standards for preventive health and evidence-based treatment to guide care plan development and improve health outcomes

The WMIP target population is Medicaid enrollees age 21 or older who are aged, blind, or disabled, including Medicaid-only enrollees and those dually eligible for Medicare and Medicaid. WMIP excludes children under 21, Healthy Options enrollees, and recipients of Temporary Assistance for Needy Families. As of December 2011, about 4,800 individuals were enrolled in WMIP.

For 2012, MHW reported 10 HEDIS measures for the WMIP population:

- comprehensive diabetes care
- inpatient care utilization—general hospital/acute care
- ambulatory care utilization
- anti-depression medication management
- follow-up after hospitalization for mental illness
- use of high-risk medications for the elderly
- mental health utilization
- identification of alcohol and other drug services
- initiation and engagement of alcohol and other drug dependence treatment
- race and ethnicity of WMIP enrollees

Because the WMIP population differs categorically from the Medicaid managed care population, it is not feasible to compare the WMIP data meaningfully with the data reported by the MCOs or with national data for health plans serving traditional Medicaid recipients.

Comprehensive diabetes care

Figure 35 presents the WMIP results for comprehensive diabetes care in reporting years 2008–2012. For definitions of these measures, see page 28.

The 2012 results generally reflect less positive trends than in 2011. The percentage of enrollees with good control of their HbA1c levels fell significantly to 50.40%, while the percentage of those with poor control rose significantly to 41.04%. All other measures came in below the 2011 levels, though not significantly lower.

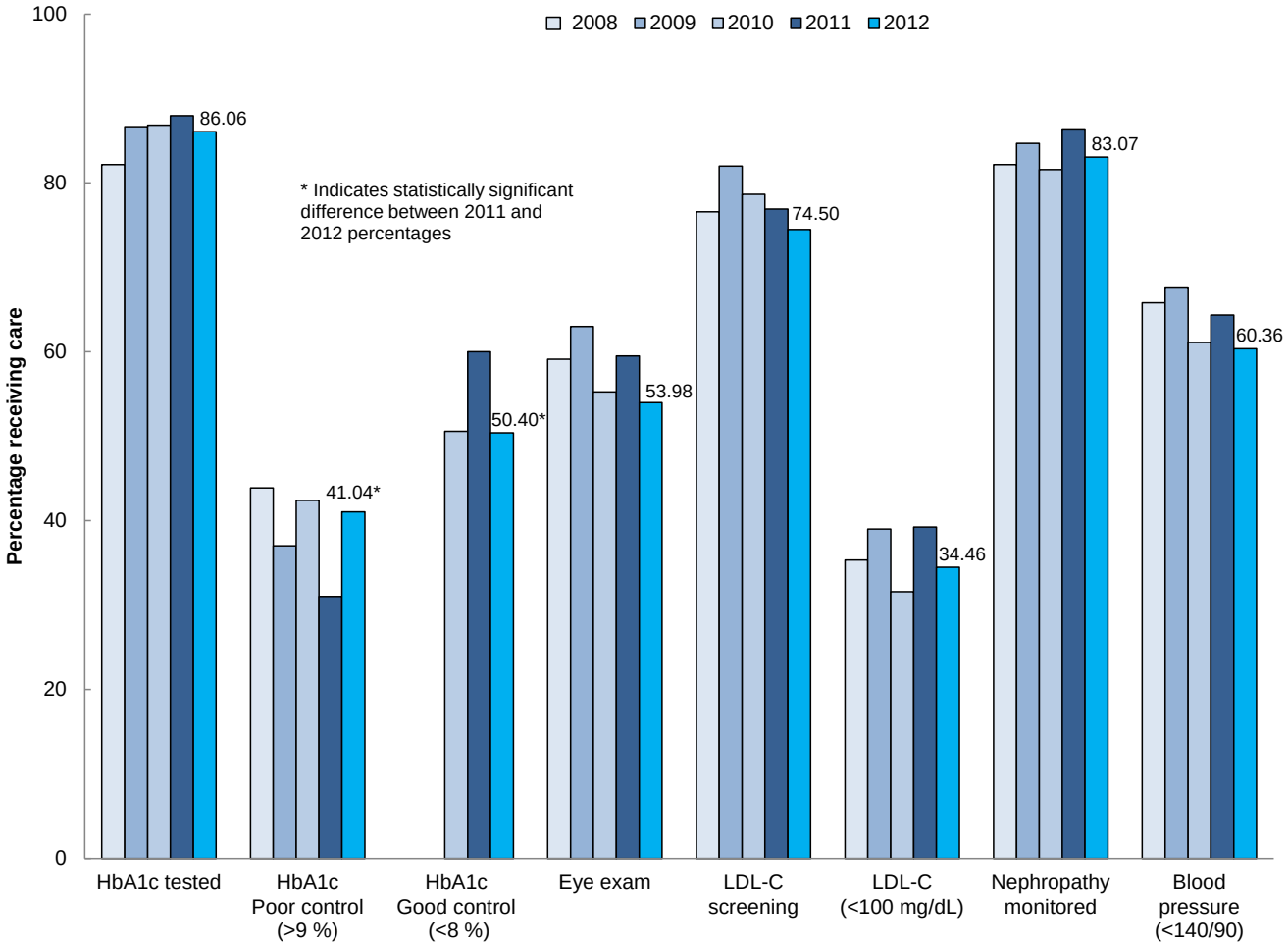


Figure 35. WMIP comprehensive diabetes care measures, reporting years 2008–2012.

Utilization measures

Figures 36–39 present the results of WMIP utilization measures since 2008:

- inpatient utilization discharges, days, and average length of stay—total inpatient (acute), medical, and surgical
- ambulatory care visits—outpatient and ER

Compared with the 2011 rates, discharge rates rose slightly in 2012 for medical care and fell slightly for total inpatient (acute) care and for surgical care, but the changes were not statistically significant (Figure 36).

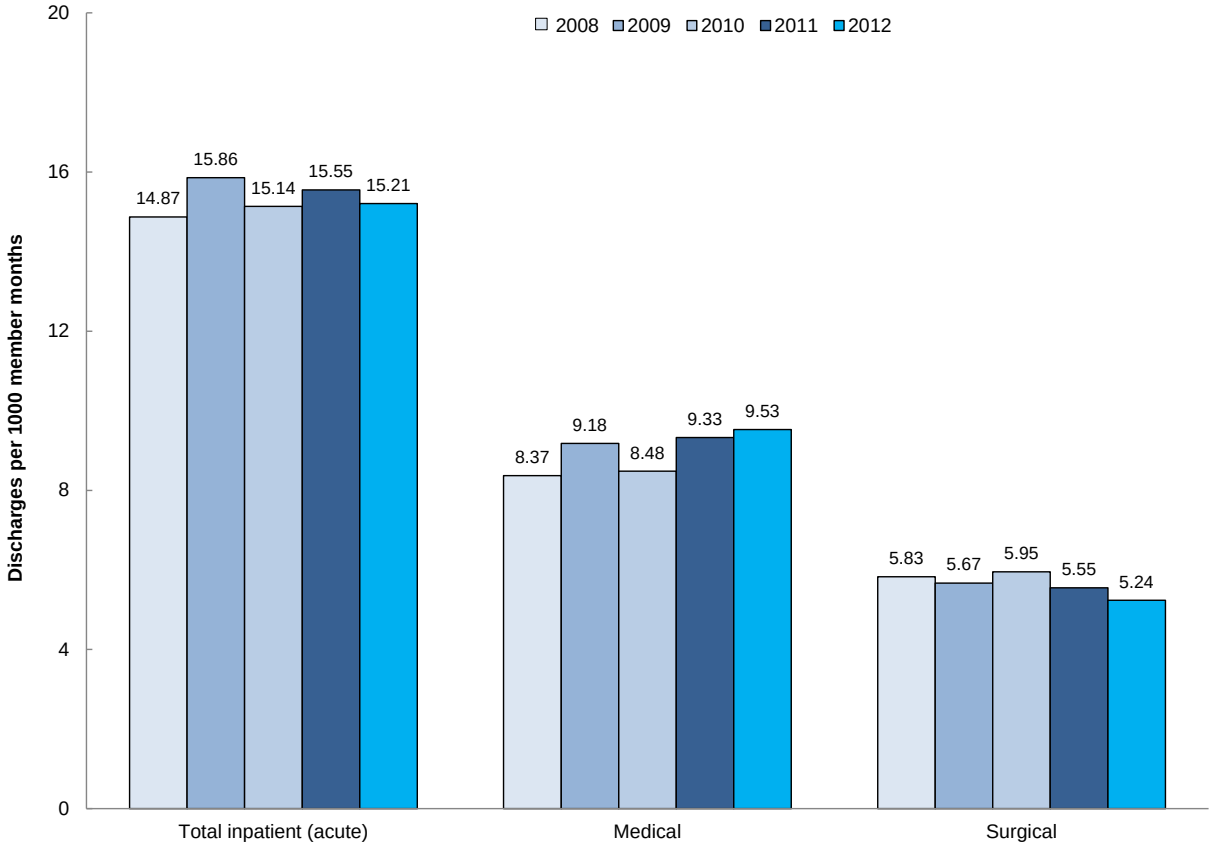


Figure 36. WMIP inpatient utilization discharges, reporting years 2008–2012.

Total inpatient (acute) and medical days for WMIP enrollees increased significantly in 2012, while surgical days remained level with 2011 (Figure 37).

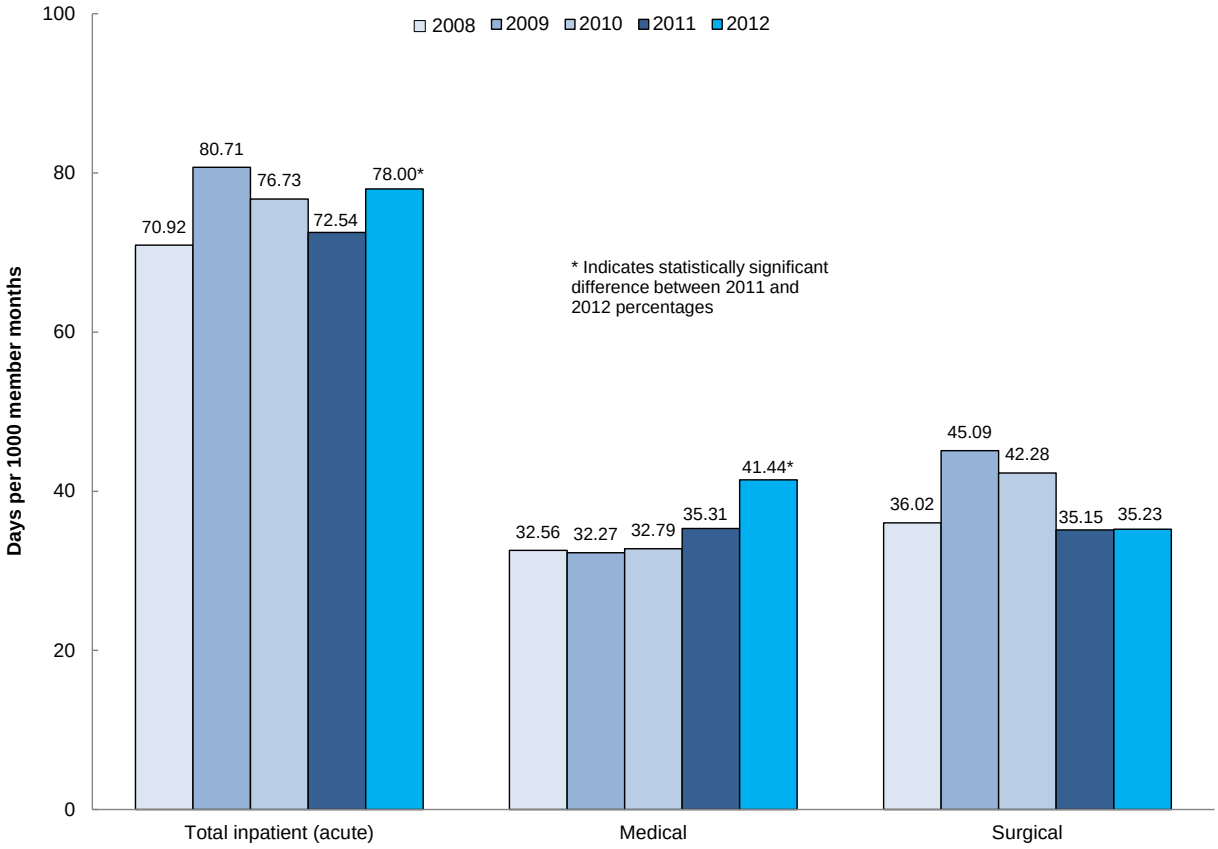


Figure 37. WMIP inpatient utilization days, reporting years 2008–2012.

WMIP enrollees' average length of stay (ALOS) for medical care rose significantly in 2012. The apparent increases in the other two categories were not statistically significant (Figure 38).

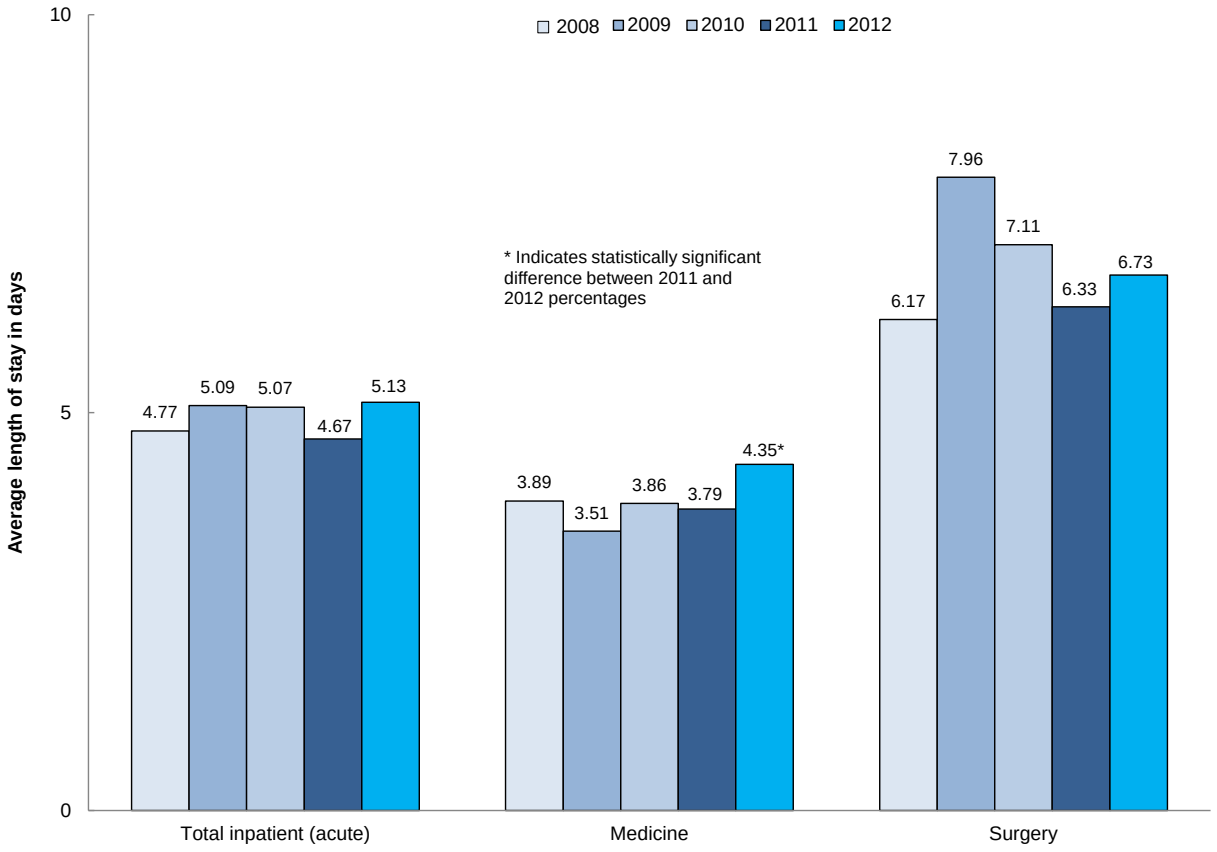


Figure 38. WMIP inpatient utilization average length of stay, reporting years 2008–2012.

According to TeaMonitor, MHW has begun a Care Transitions program in one hospital serving WMIP enrollees, with the goal of reducing readmissions within 30 days following discharge. The program features a Registered Nurse coach who visits hospitalized enrollees and makes follow-up home visits or phone calls to assist in post-discharge coordination of care. Community health workers also are involved.

Looking at the ambulatory care measures, the ER visit rate for WMIP enrollees fell significantly for the second straight year, while the outpatient visit rate registered an insignificant increase from 2011 to 2012 (Figure 39).

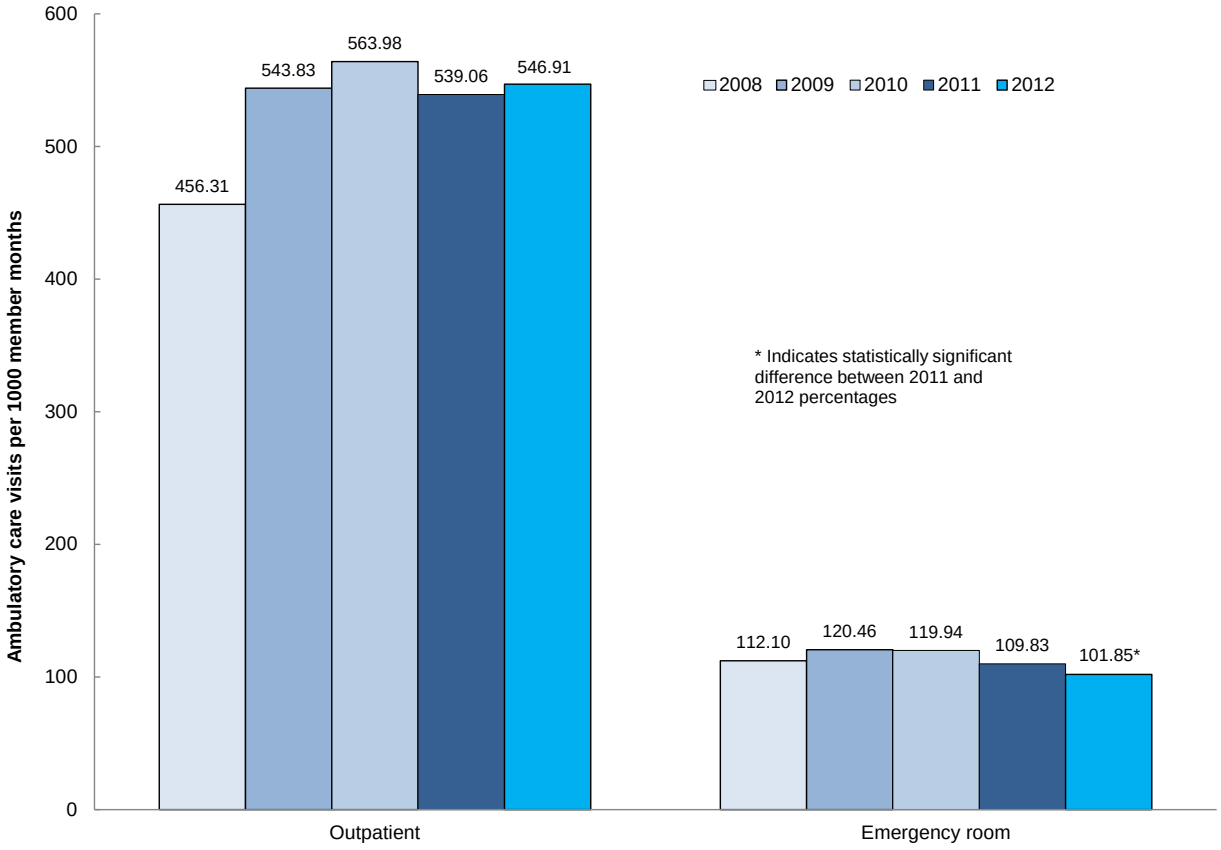


Figure 39. WMIP ambulatory care visits, outpatient and emergency room, reporting years 2008–2012.

TeaMonitor reported that MHW has begun a new PIP aimed at reducing avoidable ER visits by WMIP enrollees, and targeting one ER in Snohomish County. The intervention features follow-up by MCO or clinical staff with enrollees who visit the ER. Follow-ups focus on helping these enrollees obtain resources and on linking them to care from PCPs and within the medical home. Early results were encouraging, demonstrating significant reductions in ER visits in the first three remeasurement quarters.

Additional measures

Figures 40 and 41 present WMIP results for two behavioral health measures from 2008 through 2012.

The antidepressant medication management measure examines

- the percentage of newly diagnosed and treated patients who remained on an antidepressant medication for the treatment of major depression for at least 12 weeks (effective acute phase treatment)
- the percentage of newly diagnosed and treated patients who remained on an antidepressant medication for the treatment of major depression for at least six months (effective continuation phase treatment)

The percentage of WMIP enrollees receiving effective acute phase treatment and effective continuation phase treatment continued to show positive change in 2012, though the increases from 2011 were not statistically significant (Figure 38).

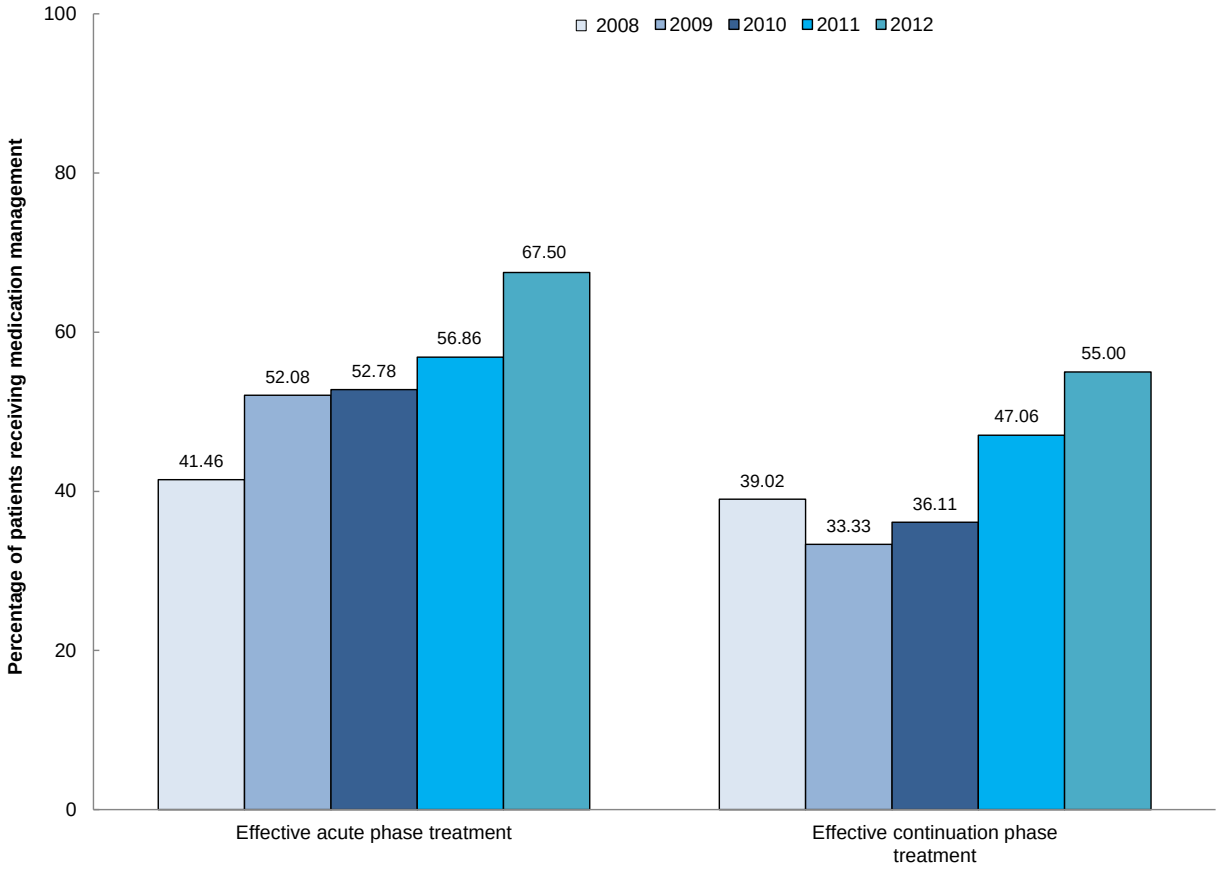


Figure 40. WMIP antidepressant medication management, reporting years 2008–2012.

The measure of follow-up after hospitalization for mental illness looks at continuity of care—the percentage of enrollees age 65 or older who were hospitalized for selected mental disorders and who were seen on an outpatient mental health care provider within 30 days or within 7 days after their discharge from the hospital. As shown in Figure 41, the percentage of WMIP enrollees receiving follow-up care within 7 days rose to 57.38% in 2012, and the 30-day follow-up rate rose to 70.49%, though neither increase was statistically significant.

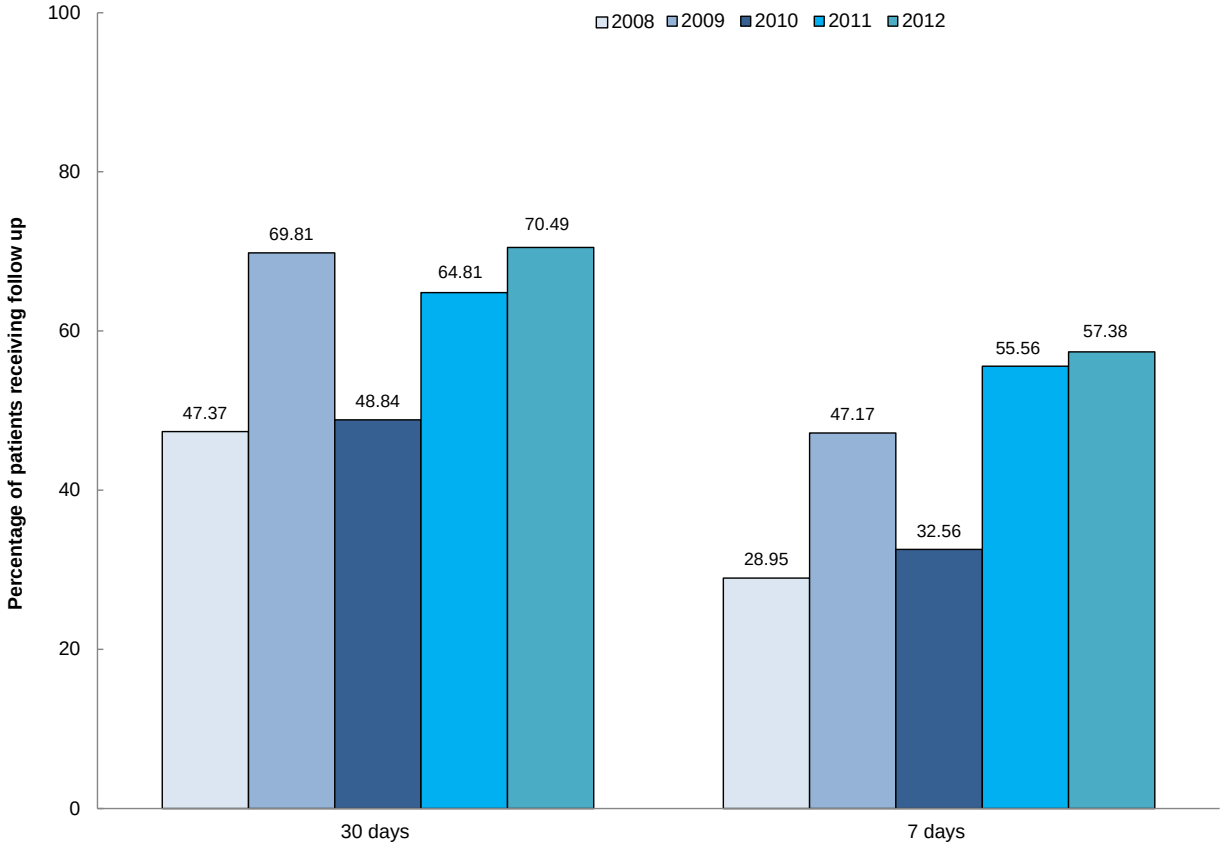


Figure 41. WMIP follow-up after hospitalization for mental illness, reporting years 2008–2012.

Figure 42 shows five years of data on the use of high-risk medications in the elderly—the percentage of enrollees age 65 or older who received at least one prescription, or at least two different prescriptions. Categories of high-risk medications include skeletal muscle relaxants, calcium channel blockers, and antihistamines. For this measure, a lower rate represents better performance.

As shown, the percentages for both indicators have trended gradually down each year since 2008, pointing to better management of these medications for WMIP enrollees. The decline in both of these measures since 2008 is statistically significant.

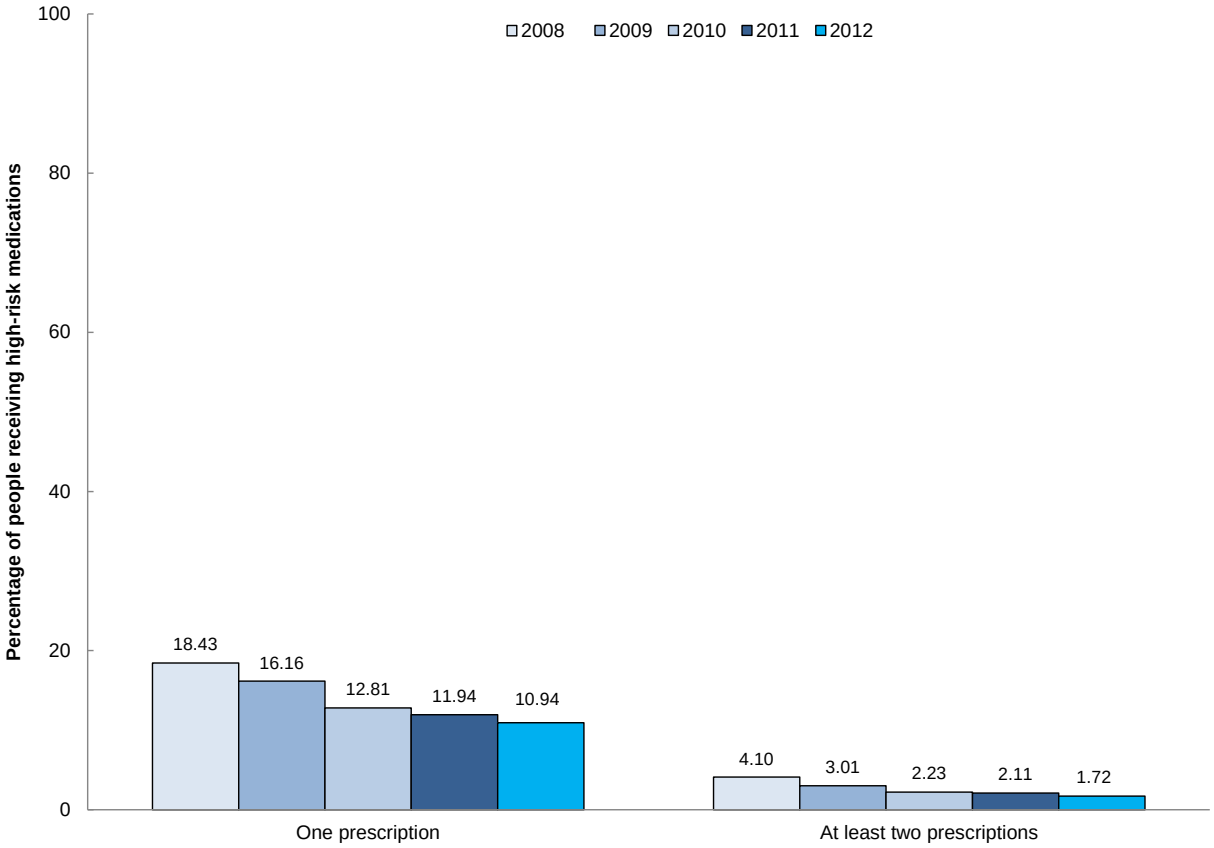


Figure 42. WMIP use of high-risk medications in the elderly, reporting years 2008–2012.

First-year measures

For the first time in 2012, HCA required MHW to report three additional HEDIS measures for WMIP focused on mental health, and alcohol and drug dependence and services (two utilization measures and an access/availability measure), defined below.

Mental Health Utilization summarizes the number and percentage of enrollees who received the following mental health services during the measurement year.

"Any service" includes at least one of the following, and some enrollees received services in multiple categories:

- Inpatient
- Intensive outpatient or partial hospitalization
- Outpatient or ER

Table 5 shows mental health utilization for all WMIP enrollees age 18 and older.

Table 5. WMIP mental health utilization, reporting year 2012.

	Number	Percent
Any service[a]	1,875	41.63
Inpatient	71	1.58
Intensive outpatient/ partial hospitalization	60	1.33
Outpatient/ER	1,840	40.85

[a] "Any" service is person-based; the other categories are visit-based.

Identification of Alcohol and Other Drug Services summarizes the number and percentage of enrollees with an alcohol or other drug (AOD) claim who received the following chemical dependency services during the measurement year.

"Any service" includes at least one of the following, and some enrollees received services in multiple categories:

- Inpatient
- Intensive outpatient or partial hospitalization
- Outpatient or ER

Table 6 shows identification of AOD services for all WMIP enrollees age 18 and older.

Table 6. WMIP identification of alcohol or other drug services, reporting year 2012.

	Number	Percent
Any service[a]	918	20.38
Inpatient	234	75.87
Intensive outpatient/ partial hospitalization	0	0.00
Outpatient/ER	819	18.18

[a] "Any" service is person-based; the other categories are visit-based.

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment measures the percentage of enrollees with a new episode of AOD dependence who received the following care.

- *Initiation of AOD treatment:* percentage of people who initiated treatment through an inpatient AOD admission, outpatient visit, intensive outpatient encounter, or partial hospitalization within 14 days of diagnosis
- *Engagement of AOD treatment:* percentage of people with a diagnosis of AOD use or dependence who initiated treatment and who had two or more additional services with a diagnosis of AOD within 30 days of the initiation visit.

Table 7 shows the percentage of initiation and engagement of alcohol or other drug dependence treatment among all WMIP enrollees.

Table 7. WMIP initiation and engagement of alcohol or other drug dependence treatment, reporting year 2012.

AOD treatment	Percent
Initiation	26.32
Engagement	2.63

According to the National Survey on Drug Use and Health, 9.8% of the population aged 12 years or older on the Pacific coast was substance-dependent or abusive in 2010, but only 1.6 % of this population received substance use treatment.[10]

The National Center on Addiction and Substance Abuse at Columbia University calculated the national cost of tobacco, alcohol, and other drug abuse and addiction in 2005 at $373.9 billion in federal and state funds, plus $93.8 billion in local funds. For Washington, state spending on substance abuse and addiction was estimated at $3.2 billion. Very little of this spending, less than three cents of every dollar, was used for prevention, treatment, or research.[11]

According to the U.S. Substance Abuse and Mental Health Services Administration, treatment has been shown to have a benefit-cost ratio of 7:1. For every $100,000 spent on treatment, $487,000 of healthcare costs and $700,000 of crime costs are avoided. A comparison of medical expenses of Medicaid clients who received treatment noted the following savings: $170 for inpatient; $215 for outpatient; and $230 for methadone treatment.[12]

In a 2009 report, *The Impact of Drugs in Washington State*, the Washington Statistical Analysis Center cited data from the Comprehensive Hospital Abstract Reporting System showing that every day in 2007, on average, 900 Washingtonians were hospitalized with conditions that could be linked to alcohol or drug use. In 2007, the per-capita cost in Snohomish County for drug-related hospitalizations was $220.[13]

The first-year HEDIS data indicate that 918 WMIP enrollees accessed AOD services, the majority of whom were served in the outpatient and ER setting. The majority initiated treatment but did not meet the criteria for engagement in services. WMIP may want to closely monitor enrollees who receive approval for AOD services and discuss how to increase the current engagement rate.

WMIP race and ethnicity measures

Table 8 presents the race and ethnicity data reported for WMIP enrollees in 2012.

Table 8. Race and ethnicity of WMIP enrollees, reporting year 2012.

	Hispanic or Latino		Not Hispanic or Latino		Unknown Ethnicity		Total	
Race	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
White	0	0.00%	4,749	85.54%	0	0.00%	4,979	71.65%
Black/African American	0	0.00%	355	6.10%	0	0.00%	355	5.11%
American-Indian and Alaska Native	0	0.00%	11	0.19%	0	0.00%	11	0.16%
Asian	0	0.00%	471	8.09%	0	0.00%	471	6.78%
Native Hawaiian/Other Pacific Islander	0	0.00%	5	0.09%	0	0.00%	5	0.07%
Some other race	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Two or more races	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Unknown	245	100.00%	0	0.00%	883	100.00%	1,128	16.23%
Declined	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Total	**245**	**100.00%**	**5,821**	**100.00%**	**883**	**100.00%**	**6,949**	**100.00%**

Discussion

The diabetes care measures for WMIP in 2012 generally reflect less positive trends than in 2011. The percentage of enrollees with good control of their blood-sugar levels fell significantly, while the percentage of those with poor control rose significantly. All other measures came in below the 2011 levels, though not significantly lower. These results point to the continuing need for a high level of coordination to ensure that enrollees in this complex population receive the recommended levels of care. Additionally, results from the first year mental health utilization, identification of alcohol and other drug services, as well as initiation and engagement of alcohol and drug dependence treatment, indicate the WMIP program may want to closely monitor enrollees that receive these services.

On a more positive note, ER visit rates for WMIP enrollees continue to fall, and the additional indicators (antidepressant medication management, follow-up after hospitalization for mental illness, and high-risk medications for the elderly) also show encouraging trends.

Washington is among 15 states (including Oregon) receiving federal contracts to design care delivery models that fully integrate primary, acute, behavioral, and long-term care for patients who qualify for both Medicare and Medicaid. The WMIP program has pioneered this type of integration since 2005. For the new dual-eligible demonstration program, the state proposes to integrate managed care in three phases, beginning by integrating high-cost dual eligibles into existing current chronic-care management programs that now serve other Medicaid clients. Successful care integration for this population is likely to involve using nurse care managers and providing mental health and substance abuse services.

Conclusions

Overall, the 2012 results for HEDIS measures tended to reflect a holding pattern. With few exceptions, the statewide performance patterns showed no significant change from 2011. As a result, the Washington MCOs continued to underperform on many measures in comparison with the national Medicaid averages. Scattered indicators such as Rotavirus immunizations, blood-pressure control in diabetes care, and infant and adolescent WCC visits showed more encouraging trends.

Service utilization measures tended to show positive results, as in previous years. Utilization rates for Washington MCO enrollees remained below the U.S. averages in most categories of inpatient and ambulatory care. Washington Medicaid enrollees visited emergency rooms at a significantly lower rate compared with Medicaid enrollees nationwide.

Results for the WMIP program were mixed. Performance on most of the diabetes care measures fell in 2012, but ER visit rates for WMIP enrollees continued to fall as well, while the behavioral health and medication-related indicators improved.

Analysis of *member-level data* for 2012 showed regional patterns similar to those reported in previous years. Immunization rates were lowest in western and southwestern Washington. The highest WCC visit rates occurred in Region 2, though the differences with other regions were not significant except in the adolescent age group.

The 2012 results reinforce the observation in previous years' reports that the Healthy Options MCOs would benefit from improving the accuracy and completeness of their encounter data. As noted previously, health plans can minimize the cost of reporting many HEDIS measures by relying primarily on administrative data as opposed to chart extraction. However, reliance on administrative data might also result in lower HEDIS rates, if the encounters reported in the administrative data do not completely capture all services provided.

Recommendations

The following recommendations apply to HCA's ongoing contracts with the new roster of MCOs that began serving Medicaid enrollees in July 2012.

To sustain long-term improvement, Acumentra Health recommends that HCA

- continue to foster public health initiatives and partnerships such as the Washington State Collaborative to Improve Care and the CHILD Profile immunization registry
- collaborate with health plans to provide performance feedback to clinics and providers
- help MCOs study and overcome barriers to improve the collection of complete member-level encounter data for HEDIS measures, so the MCOs can use these data to assess resources for improving the quality of care delivered for enrollees. The EQRO continues to find gaps in immunization and well-child datasets that limit the ability to perform comprehensive analysis.
- consider implementing a collaborative PIP that would focus, in part, on reducing non-urgent ER utilization, requiring routine reporting of ER utilization to providers, and promoting enrollee education to help reduce preventable ER visits
- reinstate incentive payments to MCOs for their performance on immunization and WCC measures
- consider requiring the MCOs to engage in a formal activity to share best practices aimed at reducing the performance gaps among health plans for specific measures

In addition, Acumentra Health recommends that the MCOs

- conduct validation studies to improve the quality of encounter data to ensure that enrollees are receiving appropriate interventions
- analyze member-level data to "drill down" on core preventive measures to identify gaps in care; share results with providers and stakeholders
- dedicate resources to improve the collection, retention, and completeness of race/ethnicity data so appropriate interventions may be established to address healthcare disparities
- provide HEDIS-specific performance feedback to clinics and providers on a frequent and regular schedule
- implement interventions to improve service delivery to underserved groups, such as the children of Russian-speaking families, or children who are not receiving the delivery of the fourth DTaP vaccination in the required series
- monitor their HEDIS rates at least quarterly, using administrative data

Finally, Acumentra Health also recommends that the WMIP program

- analyze member-level data to drill down on performance measures and identify specific areas for improvement
- explore techniques to increase engagement in alcohol and drug dependence treatment, since a high number of WMIP enrollees receive AOD services

Quality-of-Care Studies

Acumentra Health conducted two special quality-of-care studies for HCA, focusing on asthma care utilization and antidepressant medication management (AMM) for Washington Medicaid enrollees. The analysis focused on MCO-level administrative data for Medicaid managed care and fee-for-service (FFS) enrollees. For both studies, Acumentra Health used the same outpatient and inpatient claims data and demographic, enrollment, and pharmacy data to select enrollees for the study population and to segment the target population by race, gender, age, and location.

Acumentra Health analysts worked to construct the quality study metrics over a period of several years. However, state resources, data quality issues, and a lack of documentation prevented completion of the quality study analyses prior to 2012. For example, analysis by demographic characteristics could not be completed in 2011 because many enrollees identified as having new episodes of major depression did not have records in the demographic data. Data completeness issues were due, in part, to the state's conversion from the previous Medicaid Management Information System to the current ProviderOne system.

Asthma care utilization

In 2010, about 25.7 million Americans (18.7 million adults and 7 million children) reported having asthma.[14] Asthma prevalence in Washington is among the highest in the United States. An estimated 400,000 adults and 120,000 youth in Washington currently have asthma, and 1 in 10 households with children have at least one child with asthma.[15]

Each year, more than 5,000 Washingtonians are hospitalized and nearly 100 die as a direct result of asthma. Each year, about 1 in 7 adults and 1 in 5 youths make an asthma-related ER visit. In 2010, 57,000 Washington adults with asthma visited the ER at least once, accounting for about 164,000 ER visits. ER visits due to asthma are driven by a small fraction of asthma patients with very poorly controlled asthma. Public funds pay for about 60% of the state's asthma hospitalization costs. In 2010, asthma hospitalization charges in Washington were $73.2 million, of which Medicaid paid $21.8 million.[16]

Currently, the state conducts no systematic utilization monitoring for asthma care. This special study considered changes in asthma-related hospitalizations and ER visits for Medicaid enrollees from 2008 through 2010 at the health plan level, and compared utilization rates for the managed care and FFS populations. The eligible population included enrollees with persistent asthma (per HEDIS specifications), age 5 to 64 years, who met at least one of the following criteria during the measurement year and the year prior to the measurement year:

- four asthma medication dispensing events
- four outpatient asthma visits and at least two asthma medication dispensing events
- one asthma-related ER visit
- one asthma-related inpatient admission

Methods

In fall 2011, Department of Social and Health Services (DSHS) analysts submitted to Acumentra Health claims data representing all outpatient and inpatient encounters for Medicaid enrollees for the period from 2008 through 2010. DSHS analysts also submitted demographic and enrollment

data for the enrollees represented in the claims data, as well as pharmacy records for the period from 2008 through 2010.

Acumentra Health analysts first examined the data files to ensure that the data conformed to the specifications given to DSHS. Analysts examined each field for missing and out-of-range data and logic errors. Analysts also checked the demographic and enrollment data to ensure that each enrollee represented in the claims data had demographic and enrollment records.

Acumentra Health then used the claims and pharmacy data to determine the persistent asthma populations for 2010 and 2009, based on the 2011 HEDIS specifications for Use of Appropriate Medications for People with Asthma.

Using the outpatient claims data, analysts first determined the enrollees with one or more ER visits who had asthma as their principal diagnosis. For 2010, this group totaled 8,403 enrollees. Next, analysts used inpatient claims to identify enrollees with at least one inpatient stay who had asthma as their principal diagnosis. Using pharmacy and outpatient claims, analysts identified those who had at least four asthma-related medication dispensing events. Analysts found that 4,018 individuals had at least four outpatient encounters with asthma as the principal diagnosis and at least two asthma-related dispensing events in 2010.

Acumentra Health combined the enrollees in these four groups and then removed those who did not meet the continuous enrollment criterion for a given year (no more than a one-month gap of coverage). Analysts made this determination for 2008, 2009, and 2010. Finally the persistent asthma population for 2010 was determined by selecting those represented in both the 2009 and 2010 groups, and the 2009 persistent asthma population was determined by selecting those in both the 2008 and 2009 groups.

For 2010, the persistent asthma population totaled 17,645 enrollees, representing the denominator for the statistics in the asthma study. As shown in Table QS-1 on the following page, nearly two-thirds of enrollees in this population are female; 70% of enrollees are white; nearly 9 in 10 speak English; and nearly 9 in 10 are older than age 12. The gender differences among adult patients with persistent asthma are consistent with other population-based surveys conducted in Washington.[17]

Table QS-1. Demographic characteristics of enrollees with persistent asthma, 2010.			
		N	%
Gender	M	6,567	37.2
	F	11,078	62.8
Race	American Indian	717	4.1
	Asian	742	4.2
	Black	1,244	7.1
	Not provided	838	4.8
	Other	1,453	8.3
	Pacific Islander	307	1.7
	White	12,343	70.0
Language	English	15,647	88.7
	Spanish	595	3.4
	Vietnamese	342	1.9
	Russian	383	2.2
	All others	678	3.8
Age	0 to 12	2,296	13.0
	12 to 20	1,160	6.6
	20 to 30	788	4.5
	30 to 40	1,125	6.4
	40 to 50	2,598	14.7
	50 and older	9,678	54.9

Analysts selected data on gender and age from the demographic file for the persistent asthma population, and determined FFS and managed care enrollment through the enrollment data. Enrollees were determined to be FFS if they had not been assigned to an MCO during all 12 months of the calendar year. Of the 17,645 individuals in the persistent asthma population for 2010, 14,234 (81%) were FFS. Enrollees with complete MCO data for a 12-month period were assigned to the MCO group, totaling 2,203 individuals in 2010.

To calculate the study numerators, Acumentra Health used the procedure, revenue, and diagnosis codes specified by the 2012 Oregon Data Workgroup for determining enrollees with asthma-related ER visits and hospitalizations.

Acumentra Health used chi-square tests in the statistical analysis to test for proportion and rate differences, and used SAS software for the quality study analyses.

Results

Hospitalization and ER visit rates: Table QS-2 shows that 2.6% of the study population members were hospitalized for asthma in 2010, while 9.7% of the population visited the ER for asthma at least once.

Table QS-2. Asthma-related hospitalizations and emergency room visits for persistent asthma population, 2010 (N=17,645).

	N	%
Number of people hospitalized	457	2.6
Number of people visiting ER	1,709	9.7

As shown in Table QS-3, significantly higher percentages of Medicaid managed care enrollees than of FFS enrollees were hospitalized or visited the ER for asthma in 2010. Asthma-related ER visits were reported for 37% of the managed care population.

Table QS-3. Asthma-related hospitalizations and emergency room visits, managed care vs. FFS, 2010.

		N	%
Number hospitalized	Managed care (N=2,203)	169	7.7*
	FFS (N=14,234)	196	1.4
Number visiting ER	Managed care (N=2,203)	818	37.1*
	FFS (N=14,234)	572	4.0

* Indicates statistically significant difference (p<0.05).

As shown in Table QS-4, asthma-related ER visits were reported for about one-half of Healthy Options enrollees in the study, and hospitalizations were reported for about 10% of those enrollees, the largest subgroup of the study population by program.

Table QS-4. Number and percentage of persistent asthma population with asthma-related hospitalizations and emergency room visits, by managed care program, 2010.

	Hospitalizations		ER visits	
	N	%	N	%
Chronic Care Management Program (N=657)	23	3.5	74	11.3
Healthy Options (N=1,373)	135	9.8	699	50.9
State Children's Health Insurance Program (N=31)	1	3.2	8	25.8
WMIP (N=81)	0	0.0	15	18.5

NOTE: Table excludes Basic Health Plus, General Assistance–Unemployable, and Native Health PCCM because of small sample size.

Asthma-related ER visits were reported for more than half of CHP enrollees in 2010, and for about half of MHW and RBS enrollees (Table QS-5).

Table QS-5. Number and percentage of persistent asthma population with asthma-related hospitalizations and emergency room visits, by managed care plan, 2010.

	Hospitalizations		ER visits	
	N	%	N	%
Columbia United Providers (N=60)	4	6.7	15	25.0
Community Health Plan (N=466)	43	9.2	268	57.5
Molina Healthcare of Washington (N=710)	75	10.6	348	49.0
Regence BlueShield (N=115)	10	8.7	57	49.6

NOTE: Table excludes Asuris Northwest Health and Group Health Cooperative because of small sample size.

Table QS-6 shows that nearly 12% of the managed care population visited the ER multiple times for asthma (averaging three visits), compared with only 1% of the FFS population.

Table QS-6. Percentage of enrollees with multiple asthma-related emergency room visits, 2010.

	%	Average number of visits
Total population (N=17,645)	3.0	3
Managed care (N=2,203)	11.7	3
FFS (N=14,234)	1.1	3

Geographic utilization patterns: Figures QS-1 and QS-2 on the next page depict the rates of asthma-related hospitalization and ER visits by county in 2010.

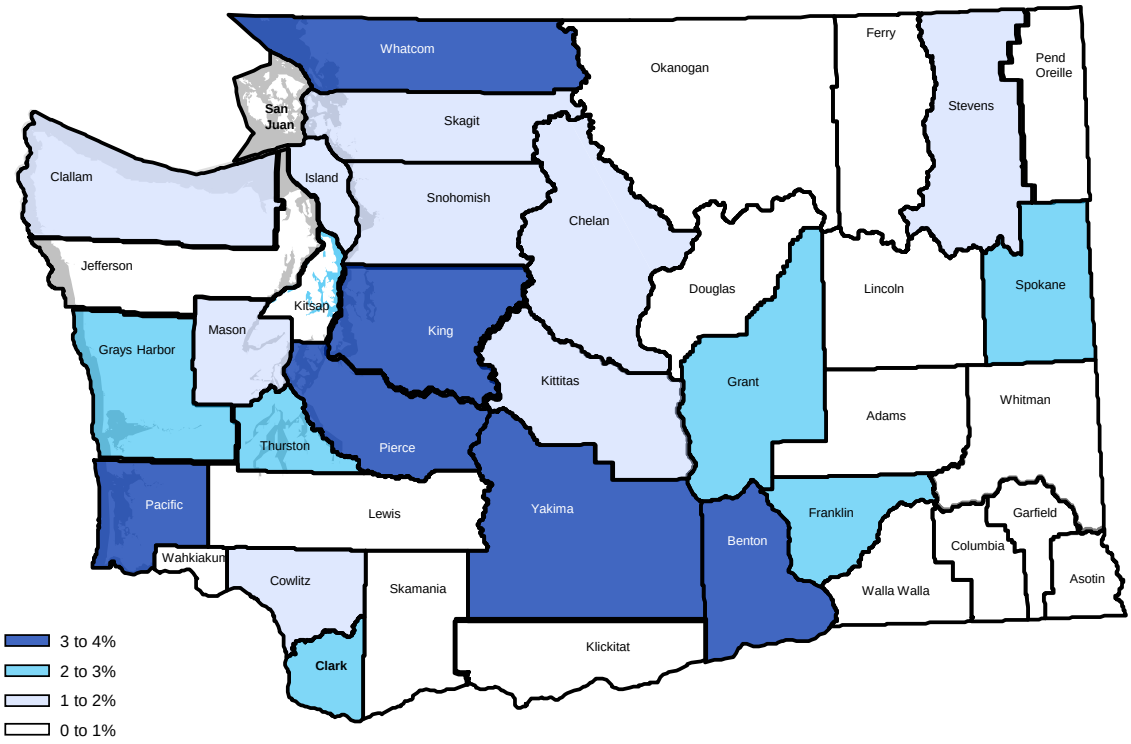


Figure QS-1. Asthma-related hospitalizations by county, 2010.

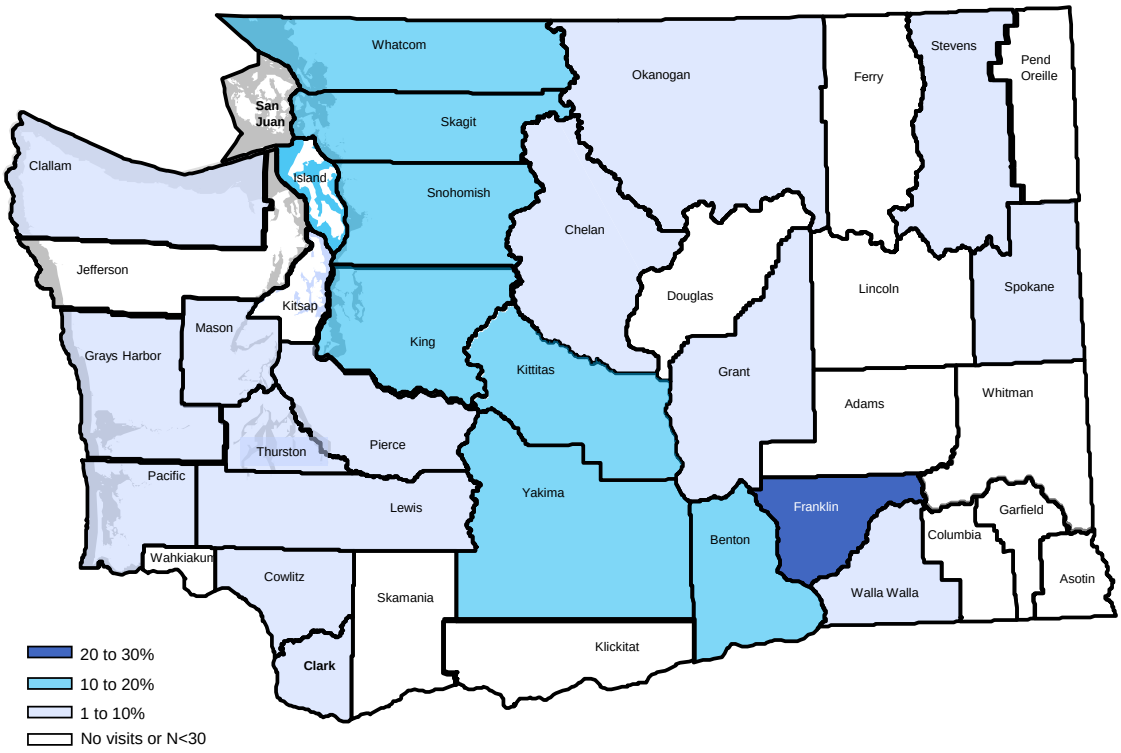


Figure QS-2. Asthma-related emergency room visits by county, 2010.

Changes from 2009 to 2010: Figures QS-3 and QS-4 depict changes in asthma-related hospitalizations and ER visits from 2009 to 2010. While much higher percentages of managed care enrollees than of FFS enrollees were hospitalized or visited the ER in both years, the percentages for managed care fell significantly in 2010.

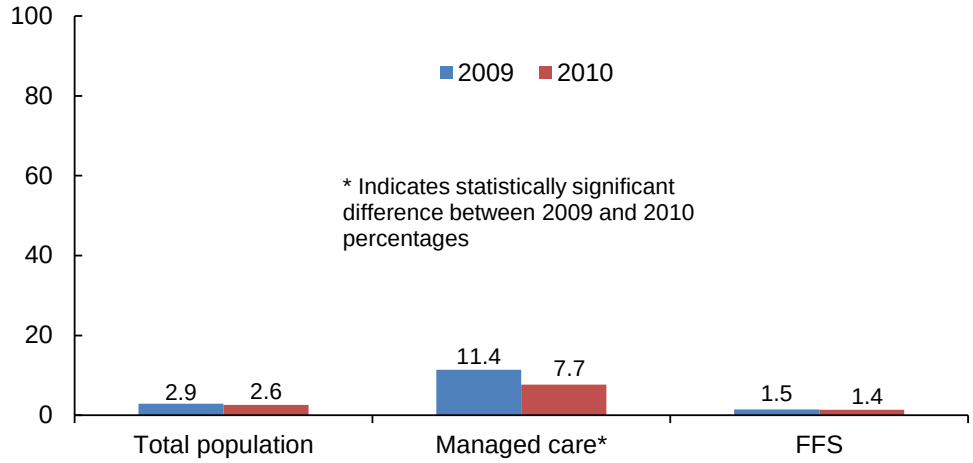


Figure QS-3. Asthma-related hospitalizations by population, 2009 vs. 2010.

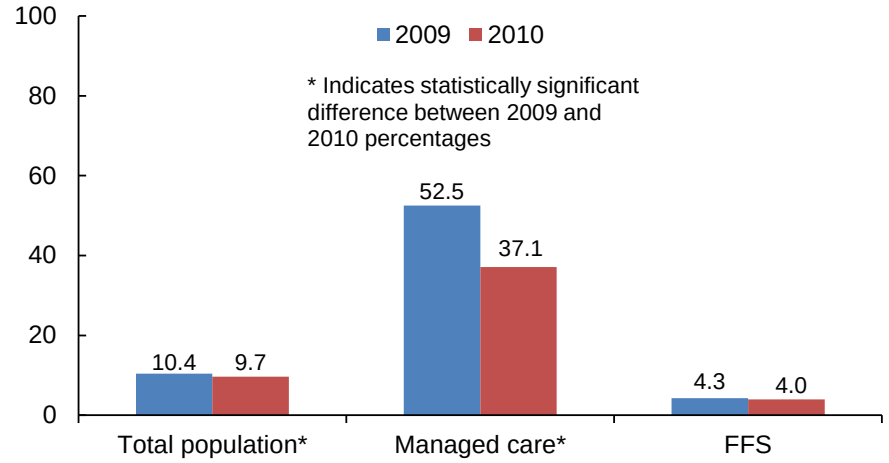


Figure QS-4. Asthma-related emergency room visits by population, 2009 vs. 2010.

Study highlights

- The persistent asthma population for this study was predominantly female (63%), white (70%), and English speaking (89%).
- In both 2009 and 2010, managed care enrollees with persistent asthma used hospital and ER services at significantly higher rates compared with FFS enrollees.
- In 2010, 37% of managed care enrollees visited the ER for asthma at least once. However, both hospitalizations and ER visits for managed care enrollees declined significantly from 2009 to 2010. It is conceivable that more recent data on asthma care utilization would show a continuing decline.
- Considering enrollees by health plan, asthma-related ER visits were reported for about 58% of CHP enrollees, for about one-half of MHW and RBS enrollees, and for about one-quarter of CUP enrollees in 2010.
- Counties with the highest rates of asthma-related hospitalizations (3 to 4%) in 2010 included Benton, King, Pacific, Pierce, Whatcom, and Yakima counties.
- The highest rate of asthma-related ER visits was reported in Franklin County (20.9%). Rates between 10 to 20% were reported in Benton, Island, King, Kittitas, Skagit, Snohomish, Whatcom, and Yakima counties.

Discussion and recommendations

Diagnoses of acute respiratory and other common infections in children, together with injuries, account for about 53% of ER visits by children aged 0 to 12 covered by Medicaid.[18] A focus on treating children's asthma in lower-cost, less resource-intensive settings that can provide a moderate intensity of care and urgent response time might lead to a substantial reduction in overall ER use.

Since ER utilization is often regarded as an indicator of success in managing patient care, the asthma study results raise concern; however, they appear compatible with recent observations in other states. A 2012 study of ER utilization in the five largest states found limited evidence that managed care sustainably reduces ER visits. Quoting from the study report:

> California had shown some reductions in ER visits among managed-care plan patients, but the gap between them and fee-for-service beneficiaries is shrinking. In New York that gap has almost disappeared, and in Illinois, ER visits are now slightly more common among managed-care beneficiaries. Only in Texas does managed care consistently produce significantly lower ER visits than in fee-for-service, though the cost of those visits is much higher.[19]

To reduce rates of hospitalization and ER visits due to persistent asthma, Acumentra Health recommends that the Washington MCOs implement asthma health management strategies for their enrollees. Successful strategies might involve identifying members with asthma, targeting interventions based on severity of illness, and promoting effective communication and care coordination among health care practitioners.

Antidepressant medication management

It is estimated that nearly 1 in 4 adult Americans will suffer from major depressive disorder during their lives.[20] Depression is reported to incur the highest medical costs among all behavioral conditions, and it causes more days of disability than are caused by chronic medical conditions such as heart disease, hypertension, and diabetes. American Psychiatric Association guidelines recommend treating depression with antidepressant medication and behavioral therapies.

Research shows that nearly half of primary care patients who begin antidepressant treatment discontinue medications within the first 90 days,[21] and half of patients discontinue medications during the maintenance phase of treatment.[22] Patients who end treatment early are more likely to relapse and to incur higher medical costs, compared with patients who comply with medication management guidelines.

For this study, Acumentra Health analyzed two components of the HEDIS measure for AMM: (1) effective acute phase treatment and (2) effective continuation phase treatment. These components measure the percentage of adult enrollees who were diagnosed with a new episode of depression, were treated with antidepressant medication, and remained on the medication (1) for the entire three-month acute phase and (2) for at least six months.

The study population included adult Medicaid enrollees newly diagnosed with major depression during 2009–2010, who had a four-month negative diagnosis history and a three-month negative medication history before the diagnosis; who remained enrolled from 120 days before diagnosis to 245 days following diagnosis; and who did not have a medication dispensed during the period from 30 days before the depression diagnosis to 14 days after diagnosis. This definition ensures that enrollees included in the sample are newly diagnosed and that they have had no prior history of antidepressant medication prescriptions.

For both the effective acute phase treatment and effective continuation phase treatment measures, analysts calculated and compared overall managed care and FFS rates, and rates by race, gender, age, and location.

Methods

Guided by the 2011 HEDIS specifications for Antidepressant Medication Management (AMM), analysts first determined the eligible population for the two AMM measures. Using the outpatient claims data, analysts selected enrollees with at least one principal diagnosis of major depression during the period of May 2009–April 2010, totaling 34,600 individuals. Analysts used the outpatient claims data to identify enrollees with two or more encounters who had any diagnosis of major depression, and used the inpatient claims to identify enrollees who had inpatient stays with any diagnosis of major depression. Analysts combined these three groups, and then selected enrollees whose depression diagnosis was a new diagnosis (i.e., who had had no depression diagnosis in the preceding four months), totaling 29,664 enrollees.

Analysts next worked with the pharmacy data to identify, among enrollees with a new major depression diagnosis, those who met the criteria for a new medication dispensed within the period from 30 days before to 14 days after the diagnosis date—a total of 5,838 enrollees.

Next, analysts applied the continuous enrollment criteria of 120 days prior and 245 days after the major depression diagnosis date, with no more than a one-month gap in enrollment. The total of those meeting these criteria, 3,100, is the eligible denominator population (see Table QS-7).

Table QS-7. Demographic characteristics of enrollees in the AMM study, 2010.

		N	%
Gender	M	957	31
	F	2,143	69
Race	American Indian	134	4
	Asian	74	2
	Black	280	9
	Not provided	168	5
	Other	299	10
	White	2,145	69
Language	English	2,883	93
	Spanish	86	3
	Russian	35	1
	All others	96	3
Age	18 to 64	3,026	98
	65+	74	2
Urban/Rural	Urban	2,708	89
	Rural	348	11

Enrollees were categorized as served in managed care if they were assigned to an MCO for the entire period from 120 days before to 245 days after the major depression diagnosis. Those categorized as FFS had no MCO assignment for the same period. Using this approach, 414 enrollees were found to be served in managed care, and 1,457 in FFS settings. An additional 1,229 enrollees had MCO coverage in some months but not in others.

Table QS-8 shows that two-thirds of FFS enrollees and nearly 80% of managed care enrollees in the AMM study population were female. Managed care enrollees tended to be represented more heavily in younger age ranges, compared to FFS enrollees.

Table QS-8. Age and gender of managed care vs. FFS enrollees in AMM study population.

Characteristic		Managed care (N=414)	FFS (N=1,457)
Age	18 to 30	37%	26%
	30 to 40	24%	18%
	40 to 50	21%	23%
	50 to 65	18%	27%
	65+	0.2%	5%
Gender	F	79%	66%
	M	21%	34%

Still using the 2011 HEDIS specifications, Acumentra Health determined the number who remained on antidepressant medications during the three months and six months following the major depression diagnosis date. To be counted in the effective acute phase treatment indicator, enrollees must have had at least 84 days of continuous treatment with antidepressant medications during the 114-day follow-up period after the earliest medication dispensing date. A maximum of 30 days without medication treatment was allowed. To be included in the effective continuation phase treatment indicator, enrollees must have had at least 180 days of continuous treatment during the 231-day period after the earliest medication dispensing date.

Results

Table QS-9 shows differences in completion of the acute phase and continuation phase according to various demographic characteristics. Male enrollees completed both treatment phases at significantly higher rates compared with females. The analysis also identified significant differences among racial and language groups, as shown. By way of comparison, the national average completion rates reported by NCQA in 2012 for Medicaid managed care plans were 51% for acute phase and 34% for continuation phase.

Table QS-9. AMM measures by demographic characteristic, 2010.

		N	Effective acute phase treatment	Effective continuation phase treatment
Gender*	M	957	44%	30%
	F	2,143	39%	26%
Race*	American Indian	134	38%	24%
	Asian	74	23%	15%
	Black	280	35%	21%
	White	2,145	43%	30%
Language*	English	2,883	42%	28%
	Spanish	86	14%	8%
	Russian	35	51%	43%
Age	18 to 64	3,026	40%	27%
	65+	74	55%	34%
Urban/Rural	Urban	2,708	40%	27%
	Rural	348	44%	30%

* Indicates statistically significant difference (p<0.05).

Table QS-10 shows the percentages of enrollees in each age group who completed the three-month acute treatment phase vs. those who completed the continuation phase. For both phases, the percentage of completion increased as enrollees' age increased. In all age groups, a larger percentage of enrollees completed the acute phase than completed the continuation phase.

Table QS-10. AMM measures by age, total eligible population (N=3,100).

Age	N	Effective acute phase treatment*	Effective continuation phase treatment*
18 to 30	986	32%	18%
30 to 40	678	37%	23%
40 to 50	702	46%	34%
50 to 65	660	50%	38%
65+	74	55%	34%

* Indicates statistically significant difference (p<0.05).

As shown in Table QS-11, managed care enrollees completed acute phase treatment at significantly lower rates than did FFS enrollees in both urban and rural areas. For the continuation phase indicator, the difference between managed care and FFS enrollees was significant only for those living in urban areas.

Table QS-11. AMM measures by urban/rural address, managed care vs. FFS.

	Effective acute phase treatment		Effective continuation phase treatment	
	Urban	Rural	Urban	Rural
Managed care	34%*	31%*	24%*	24%
FFS	45%	49%	31%	37%

* Indicates statistically significant difference (p<0.05).

Figures QS-5 and QS-6 on the following page show AMM measures by county, for those counties where the data sample was large enough to permit this analysis.

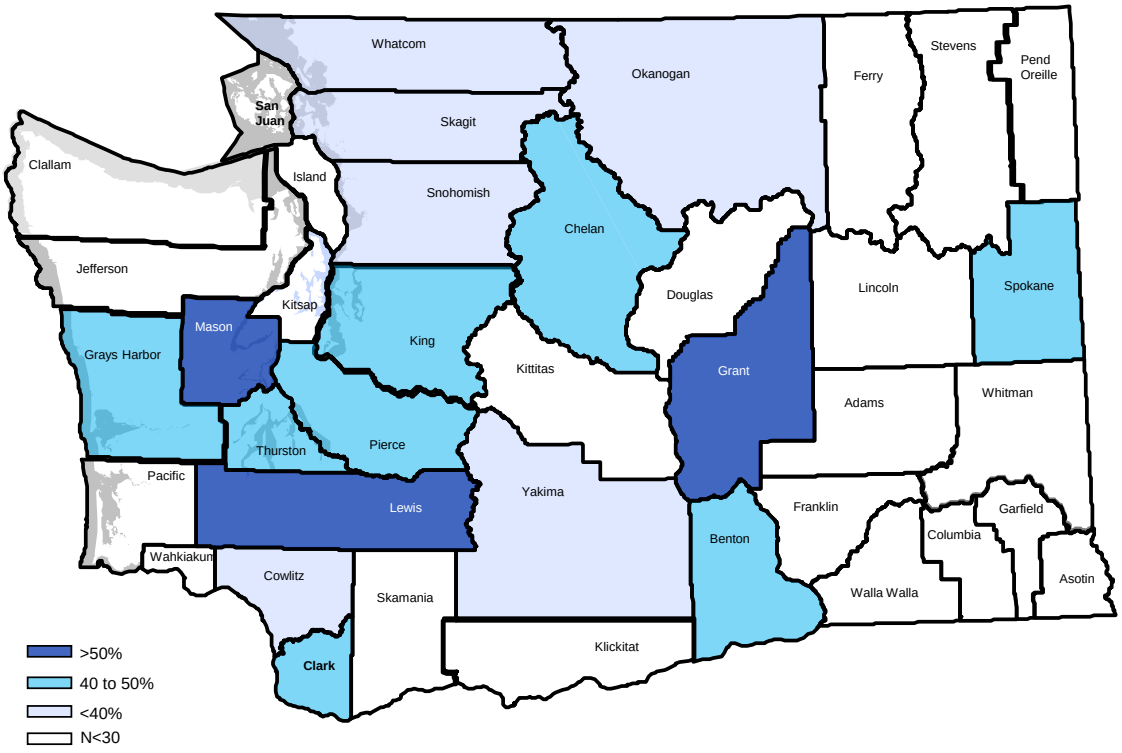


Figure QS-5. Effective acute phase treatment by county, 2010.

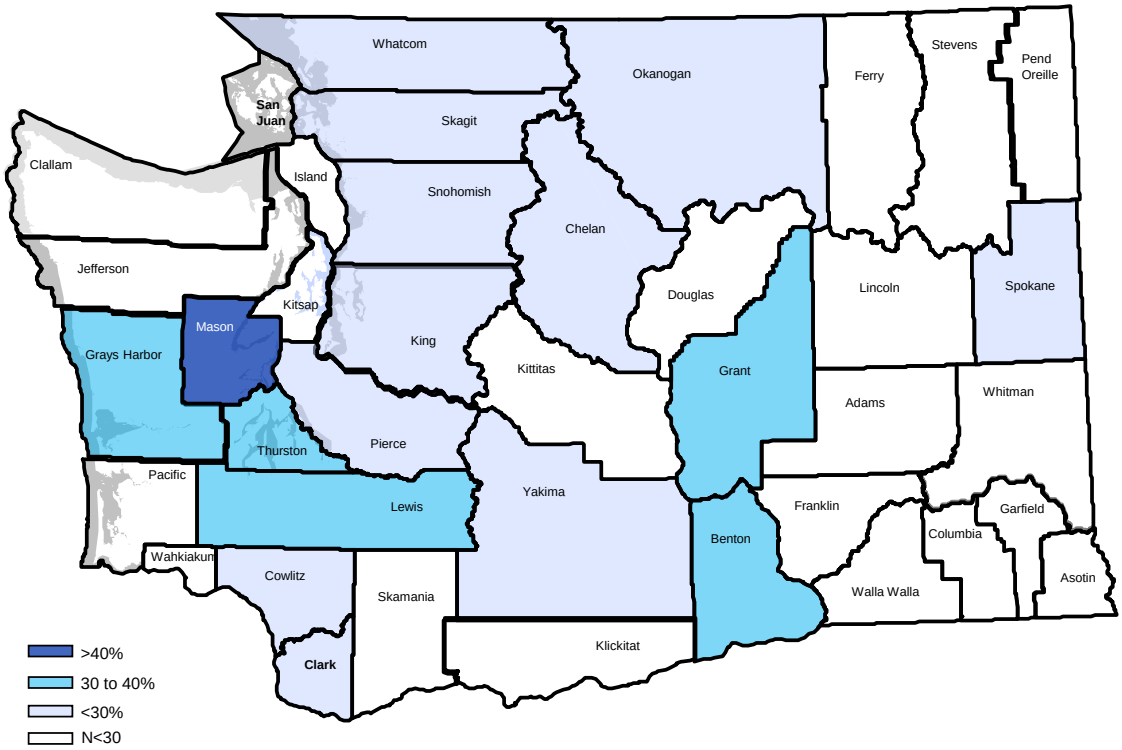


Figure QS-6. Effective continuation phase treatment by county, 2010.

Study highlights

- The AMM study population was predominantly female (69%), white (69%), English speaking (93%), and urban (89%).
- Managed care enrollees tended to be represented more heavily in younger age ranges, compared with FFS enrollees.
- For both acute and continuation phase treatment, the completion rates increased as enrollees' age increased. In all age groups, a larger percentage of enrollees completed the acute phase than completed the continuation phase.
- Male enrollees in the study population completed both acute phase and continuation phase treatment at significantly higher rates compared with females.
- Managed care enrollees completed acute phase treatment at significantly lower rates than did FFS enrollees in both urban and rural areas.
- Enrollees in Grant, Lewis, and Mason counties completed acute phase treatment at the highest rates, 52 to 54%. The lowest acute phase completion rate occurred in Snohomish County (33%).
- Completion of continuation phase treatment was highest in Mason County (42%) and lowest in Chelan, Skagit, and Yakima counties (20 to 25%).

Discussion and recommendations

The study results show that in 2010, completion of both acute and continuation phase treatment tended to increase as enrollees' age increased. Male enrollees completed both treatment phases at significantly higher rates compared with females. Analysis also revealed significant differences in completion rates on the basis of race and primary language. In addition, both AMM measures were lower for managed care enrollees than for FFS enrollees.

To improve rates of adherence to medication management, Acumentra Health recommends that HCA study the reasons for disparate rates of treatment completion between male and female enrollees, and among enrollees from different demographic groups, as indicated by the study data. HCA could then work with MCOs to design interventions aimed at improving AMM rates, possibly including provider incentives for outcomes related to medication management.

Additionally, Acumentra Health recommends that HCA

- develop data quality control procedures to ensure a basic level of data integrity
- develop a system of documentation, including data dictionaries, to help give analysts and programmers a more complete understanding of the variables in each of the claims, enrollment, and demographic datasets

Addressing data completeness will improve the value of future quality-of-care studies by enhancing analysts' ability to drill down on multiple variables that affect care measurement results.

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