

Less Harm. Less Waste. Choosing Wisely® in Washington State

## August 2016

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#### Dear Community Member:

We are pleased to release the Washington Health Alliance's second report about Choosing Wisely<sup>®</sup>, a national program sponsored by the American Board of Internal Medicine (ABIM) Foundation with the goal of promoting conversations between providers and patients about choosing appropriate care in order to reduce both harm and waste.

Since 2013 the Alliance, the Washington State Medical Association and the Washington State Hospital Association have co-sponsored the Washington State Choosing Wisely Task Force. The Task Force represents a unique alliance of medical leaders from 24 of our state's health care organizations, who are dedicated to using data to inform care and guide strategies.

This report is the second time that we have looked at Choosing Wisely recommendations in Washington state, with the hope of informing local discussions about appropriate health care. I am pleased to share this data with you and to highlight an improvement in the statewide rate for both the commercially insured and Medicaid populations across six of the 10 measures. There was a notable decrease in the percentage of women receiving too-frequent pap tests, down 13 percentage points from the previous report. The hope of the Alliance is that this report will serve as a resource for Washington residents to engage in conversations about smarter and better care.

Finally, we would like to acknowledge the ABIM Foundation and the Robert Wood Johnson Foundation for providing funding and ongoing support for this effort, and Consumer Reports for making its consumer materials available to us. We also want to thank Qualis Health, which provided Medicare results for three measures in the report. This project continues to prove the power of partnerships to make an impact on health care, both at the local and national levels.

#### Nancy A. Giunto

Washington Health Alliance Executive Director



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## Choosing Wisely<sup>®</sup> in Washington state

#### What is Choosing Wisely?

Choosing Wisely is a national initiative sponsored by the American Board of Internal Medicine (ABIM) Foundation. It promotes informed conversations between providers and patients about the overuse of tests, treatments and procedures and supports effective care choices.

Since its launch in 2012, Choosing Wisely has been widely recognized across the United States health care system as a leading effort to spark discussions about what care is truly necessary. More than 70 medical specialty society partners have collectively identified more than 400 tests, treatments and procedures they have identified as overused in their specialty. Consumer Reports is a valuable partner in the campaign, having developed 120 patient-friendly reports from the specialty society recommendations to educate patients about what care is best for them.

#### **Choosing Wisely initiative in Washington state**

Since 2013 the Washington Health Alliance (the Alliance) and the Washington State Medical Association (WSMA) have received grants from the ABIM Foundation to support the Choosing Wisely campaign. The Alliance and WSMA partner together to implement a coordinated strategy to promote appropriate care with providers, consumers and health care purchasers. Both the Alliance's Quality Improvement Committee of physician leaders and the WSMA and Washington State Hospital Association (WSHA) Medical Officer Collaborative provide ongoing senior leadership support for this important joint effort.

#### Washington State Choosing Wisely Task Force

Washington state's flagship project for the Choosing Wisely initiative is the Choosing Wisely Task Force. This is a unique effort co-sponsored by the Alliance, WSMA and WSHA that unites 24 medical leaders representing the state's diverse range of health care organizations. It is an energized and dedicated working group focused on implementing appropriate and high-value care. The Task Force continues to strategize, focusing on data and actions that are relevant and likely to make a difference in local practices and communities.

Since there are no existing national measures to leverage for the Choosing Wisely recommendations, in 2013 the Choosing Wisely Task Force collaborated to develop the measures included in this document. The Choosing Wisely recommendations were selected from initial code sets generously provided by Premera Blue Cross and Group Health and then refined through the efforts of the Choosing Wisely Task Force.

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Hospital Association



## **Results summary**

#### **KEY FINDINGS**

- Variation between counties remains high.
- 26 percent of Washington patients with upper respiratory infections were prescribed potentially unnecessary antibiotics.
- Fewer women are receiving Pap tests too frequently compared to 2011–2012 results.
- There is an increase in people receiving imaging scans for lowback pain compared to 2011–2012 results.
- Washington's children are receiving fewer CT for appendicitis compared to 2011–2012 results.
- 42 percent of Washington women with simple adnexal cysts had a potentially unnecessary follow-up imaging test.

The Alliance released its first Choosing Wisely report in September 2014. This report provides an updated look at results in Washington state, county-by-county, for 10 select Choosing Wisely recommendations. The results are based on claims data for the period of July 1, 2013 to June 30, 2014. The previous report covered the period from July 1, 2011 to June 30, 2012. Some changes can affect results, such as different populations being included in measurement from one year to the next or minor changes in measurement definitions.

This report shows variance in rates of care across Washington state for commercially and Medicaid-insured enrollees. This year, thanks to Special Innovation Project funding from the Centers for Medicare & Medicaid Services (CMS) provided to Qualis Health,<sup>1</sup> the Alliance has partnered with Qualis Health to supplement our available data with Medicare results for the following three Choosing Wisely measures included in this report:

- Antibiotics for upper respiratory infections
- Imaging for uncomplicated headaches
- Imaging for simple syncope

The maps provided throughout this report present an overview of the percentage of patients by county, compared to the statewide average, who have either received a potentially unnecessary test, procedure or treatment or who did not receive a potentially beneficial test. The focus is on those rates—commercial, Medicaid or Medicare—that show a statistically significant difference from the statewide rate.

<sup>&</sup>lt;sup>1</sup> Qualis Health, one of the nation's leading population health management organizations, is the Medicare Quality Improvement Network – Quality Improvement Organization for Idaho and Washington under contract with the Centers for Medicare & Medicaid Services, working with health care providers, consumers and community partners to redesign processes, build sustainable change and deliver care with improved value, quality and safety for patients.



The results in the current analysis reveal both bright spots and areas for improvement. On the one hand, some of the results reflect how recommendations have already become common practice. On the other hand, other results show potentially troubling practice patterns. Counties that perform well on measures are setting the pace for other areas of the state as Choosing Wisely recommendations are more widely adopted.

#### What is the target?

Although Choosing Wisely focuses on tests, treatments and procedures that are overused according to clinical leaders across the country, the goal of Choosing Wisely recommendations is not necessarily to eliminate the use of a particular test, treatment or procedure in all situations. As each patient situation is unique, clinicians and patients are strongly encouraged to use the recommendations as guidelines to discuss the benefits and risks and determine an appropriate treatment plan together.

### Measure shift

Since the previous report, the Washington State Choosing Wisely Task Force shifted its focus from 11 to 10 of the measures it developed in 2013, with one measure replaced and one retired.

- In 2015 the Task Force developed a new measure, antibiotics for upper respiratory infections, which includes sinusitis and other for upper respiratory infections. For this reason, the Task Force retired the antibiotics for sinusitis measure as results are captured in the new upper respiratory infections measure. More background information can be found on page 8.
- Learning from the results from the previous report, the Task Force retired the measure, "Imaging for sinusitis" because the results reflected that avoiding imaging for sinusitis was already a standard, consistent practice across Washington state. Additionally, refreshed results confirmed this finding with results similar to that of previous years: 0.3 percent Medicaid, 0.9 percent commercial and very little to no variation across counties.



# Antibiotics for upper respiratory infections

**Choosing Wisely recommendation:** Avoid prescribing antibiotics for upper respiratory infections.<sup>2</sup>

#### Why it matters

Most respiratory infections are caused by viruses and antibiotics fight infections caused by bacteria. Therefore, antibiotics don't treat most upper respiratory infections. Wide use of antibiotics breeds bacteria that become resistant to antibiotics, called "superbugs." These superbugs can cause drug-resistant infections that can even lead to disability or death, and can also spread to family members and the wider community.<sup>3</sup>

Drug-resistant infections usually need more costly drugs and extra medical care. They sometimes require a hospital stay. In the United States, this costs us over \$20 billion a year.<sup>4</sup>

**Clinical note:** In certain situations, like acute exacerbation of chronic obstructive pulmonary disease (COPD) or in treatment of pertussis, antibiotic treatment is warranted.<sup> $\dagger$ </sup>

#### About the new measure

The following reflects the first results for the new measure on antibiotics for upper respiratory infections. The Task Force was fortunate to learn from Virginia Mason Medical Center, which has been implementing various antibiotic stewardship measures for five years. The URI measure is a replacement for the antibiotics for sinusitis measure covered in the previous report. The change to the antibiotic stewardship measure was a result of learning from Virginia Mason and other health systems that some providers were using a different diagnosis to avoid being "dinged" for failure to adhere to the measure. The new measure provides a more holistic approach to the mission of Choosing Wisely and antibiotic stewardship. Choosing Wisely is not just about following a specific recommendation or measure—it also represents a larger framing to view all health care decisions through a lens of selecting evidence-based tests, treatments and procedures and avoiding doing things that do not add value and may cause harm to the patient. It is the hope of the Choosing Wisely Task Force that this measure captures that intention.

#### **Findings**

As seen in table 1 on the following page, the all-payer (commercially insured and Medicaid) statewide average is 26 percent, with a wide range between rates for commercial and Medicaid enrollees (30 percent and 16

**26%** of Washington

patients with upper respiratory infections were prescribed potentially unnecessary antibiotics.

<sup>&</sup>lt;sup>2</sup> Choosing Wisely. Infectious Diseases Society of America. Avoid prescribing antibiotics for upper respiratory infections. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/clinician-</u>lists/infectious-diseases-society-antbiotics-for-upper-respiratory-infections/.

<sup>&</sup>lt;sup>3</sup> Consumer Health Choices. Antibiotics for Respiratory Illness in Adults. Accessed July 19, 2016 at <u>http://consumerhealthchoices.org/report/antibiotics-respiratory-illness-adults/</u>.

<sup>&</sup>lt;sup>†</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.

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percent respectively). There is approximately a 10 percentage point drop across all categories for the new upper respiratory infections measure, when compared to the sinusitis only measures. This drop is expected since more diagnosis codes were added to the measure, which means more cases are added in the denominator.

Variation remains high across Washington counties among patients with upper respiratory infections who were prescribed potentially unnecessary antibiotics. The variation is the highest among Medicaid enrollees, with a 41 percentage point difference between the best and worst performing counties, despite Medicaid having a lower statewide rate than the commercial rate. Among commercial enrollees, there is a 33 percentage point difference from the best performing county and worst performing county.

#### Table 1. Antibiotics for upper respiratory infections

The percentage of patients with upper respiratory infections who were prescribed potentially unnecessary antibiotics in Washington state, comparing best and worst performing counties 2013-2014 measurement years.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	30%	23% in Jefferson and San Juan	56% in Garfield
Medicaid	16%	10% in Clark	51% in Garfield
All-Payer	26%		

Some of the counties on the map below have similar rates yet appear to be different relative to the state average. For example, Snohomish is green with a rate at 28% and Okanagan is yellow with a rate of 27%. This means that the confidence interval range for Snohomish county was completely below the state rate of 30%, making the results statistically different; whereas the confidence interval range for Okanagan county includes the state's average rate and therefore is not statistically different.



#### Figure 1. Antibiotics for upper respiratory infections, commercial

The percentage of commercially insured patients with upper respiratory infections who were prescribed potentially unnecessary antibiotics, compared to the state **commercial average of 30%**.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

#### **Figure 2. Antibiotics for upper respiratory infections, Medicaid** The percentage of Medicaid-insured patients with upper respiratory infections who were prescribed potentially unnecessary antibiotics, compared to the state **Medicaid average of 16%**.\*



Rating Symbol TOO FEW CASES (<30) WORSE THAN STATE AVERAGE MEETS STATE AVERAGE BETTER THAN STATE AVERAGE

\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.



#### Medicare results for upper respiratory infections measure

The antibiotics for upper respiratory infections measure is the first of three measures for which the Alliance is reporting Medicare results supplied by Qualis Health. The statewide rate for Medicare enrollees of 28 percent is only slightly higher than the all-payer statewide average of 26 percent. There is a wide range between the best performing county, King at 24 percent, and the worst performing county, Whitman at 42 percent.

**28%** of Medicare enrollees with upper respiratory infections were prescribed potentially unnecessary antibiotics.

#### Figure 3. Antibiotics for upper respiratory infections, Medicare

The percentage of Medicare-insured patients with upper respiratory infections who were prescribed potentially unnecessary antibiotics, compared to the state *Medicare average of 28%*.\*



## Imaging for uncomplicated headache

**Choosing Wisely recommendation:** Don't do imaging for uncomplicated headache.<sup>5</sup>

#### Why it matters

Headaches are among the most common ailments in the United States. Physicians perform tests such as computed tomography (CT) and magnetic resonance imaging (MRI) for headaches to identify serious life-threatening events, such as brain tumors. However, CT of the head is associated with substantial radiation exposure, which may elevate the risk of cancer later given that patients may receive multiple CTs over their lifetime.<sup>6</sup> This risk, coupled with the increasingly high exposure per examination, could translate into many cases of cancer resulting directly from the radiation exposure from CT.<sup>7</sup>

**Clinical note:** There are specific situations in which imaging for an acute headache is necessary and can be lifesaving. For example, a person with a headache with a sudden onset that reaches maximal intensity in a few minutes should be seen by a doctor and may need a brain imaging test.<sup>†</sup>

#### **Findings**

As seen in table 2 below, the all-payer average is 21 percent of patients who had an uncomplicated headache and who received a potentially unnecessary imaging test. The variation is small between commercial and Medicaid enrollees (20 and 23 percent, respectively). The results demonstrate a small improvement from the 2011-2012 findings, which found a statewide rate of 25 percent, commercial rate of 22 percent and Medicaid rate of 30 percent.

The variation among counties remains high. Medicaid has the highest variation with a 33 percentage point difference between the best and worst performing counties. This is similar to what was found in the 2011-2012 data, with Medicaid's statewide rate at 30 percent and best performing county at 13 percent and worst performing county at 41 percent. The variation for commercial enrollees includes a 14 percentage point difference between the best and worst performing counties. This shows a slight improvement from the 2011-2012 data, with the commercial



**21%** of Washington patients with an

uncomplicated headache, such as migraine, sinus or tension headache, had potentially unnecessary CT or MRI.

<sup>&</sup>lt;sup>5</sup> Choosing Wisely. American College of Radiology. Don't do imaging for uncomplicated headache. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/clinician-lists/american-college-radiology-imaging-for-uncomplicated-headache/</u>.

<sup>&</sup>lt;sup>6</sup> Smith-Bindman R, Lipson J, Marcus R, et al. Radiation Dose Associated With Common Computed Tomography Examinations and the Associated Lifetime Attributable Risk of Cancer. Arch Intern Med. 2009;169(22):2078-2086. doi:10.1001/archinternmed.2009.427.

Accessed July 19, 2016 at: <u>http://archinte.jamanetwork.com/article.aspx?articleid=415384</u>.

<sup>&</sup>lt;sup>7</sup> Edlow J, Panagos P, Godwin S, Thomas T, and Decker W. Clinical policy: critical issue in the evaluation and management of adult patients presenting in the emergency department with acute headache. Annals of Emergency Medicine. 2008;51(4):407-436. Accessed July 19, 2016 at: <u>http://www.ncbi.nlm.nih.gov/pubmed/18809105</u>.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



data showing a 20 percentage point difference between best and worst performing counties.

#### Table 2. Imaging for uncomplicated headache

The percentage of patients with uncomplicated headache who had potentially unnecessary imaging tests in Washington, comparing best and worst performing counties in the 2013-2014 measurement years.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	20%	13% Grant	27% Franklin
Medicaid	23%	9% Douglas	42% Island
All-Payer	21%		

#### Figure 4. Imaging for uncomplicated headache, commercial

The percentage of commercially insured patients who had uncomplicated headache and had potentially unnecessary imaging tests, compared to the state **commercial** average of 20%.\*





#### Figure 5. Imaging for uncomplicated headache, Medicaid

The percentage of Medicaid-insured patients who had uncomplicated headache and had potentially unnecessary imaging tests, compared to the state **Medicaid** average of 23%, 2013-2014.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

#### Medicare results for imaging for uncomplicated headache

The measure imaging for uncomplicated headache is the second measure for which the Alliance is reporting Medicare results supplied by Qualis Health. The statewide average for Medicare enrollees with uncomplicated headache receiving potentially unnecessary imaging tests is 21 percent, comparable to the rates of commercial and Medicaid enrollees (20 and 23 percent, respectively). There is slight variation across the counties with a 14 percentage point difference between the best performing county, Jefferson at 9 percent, and the worst performing county, Snohomish at 23 percent. The best performing counties for Medicaid and Medicare both have a rate of 9%, Douglas and Jefferson, respectively. **21%** of Medicare enrollees with an uncomplicated headache received a

potentially unnecessary imaging test.



#### Figure 6. Imaging for uncomplicated headaches, Medicare

The percentage of Medicare-insured patients who had an uncomplicated headache and had a potentially unnecessary imaging test, compared to the state **Medicare** average of 21.\*



## Too-frequent Pap tests

**Choosing Wisely recommendation:** Don't perform routine *annual* cervical cytology screening (Pap tests) in women 30–65 years of age.<sup>8</sup>

#### Why it matters

A Pap test, also called a Pap smear, is a routine screening test for early diagnosis of cervical cancer (cancer of the cervix). Since 1998 most United States professional medical societies have agreed that women do not need *annual* Pap tests.<sup>9</sup> In 2012 the U.S. Preventive Services Task Force released screening guidelines recommending Pap tests for cervical cancer every three years depending on women's risk factors.<sup>10</sup> A woman and her clinician should discuss the frequency of pap tests depending on the patient's age, medical history, and individual risks.<sup>11</sup>

## **Clinical note:** For patients with a previous abnormal Pap test result or a history of cancer, annual Pap tests are often recommended.<sup>†</sup>

#### **Findings**

As seen in table 3 on the following page, the all-payer average for patients received potentially too frequent Pap testing in Washington state is 44 percent. This is a marked improvement from the 2011-2012 data, which showed an all-payer rate of 57 percent. Improvement is seen for both commercial and Medicaid enrollees, with commercial now at 45 percent (compared to 59 percent in the last report) and Medicaid now at 33 percent (compared to 44 percent).

Part of this improvement may be explained by a measure change that added exclusions. This means that women who should be having annual Pap tests, women who have had cancer, were removed from the eligible population to which this recommendation to reduce routine, annual tests is being applied. Excluding women with cancer from this recommendation would reduce the number of women who may be getting more frequent Pap tests for valid reasons, which may reduce the overall population of women receiving too frequent tests.

Despite the improvement, the variation across counties increased for commercial enrollees. For commercial enrollees, the variation found in the 2013-2014 measurement year is a 38 percentage point difference, which represents a significant jump from the 2011-2012 data, which showed a 21

http://onlinelibrary.wiley.com/doi/10.3322/canjclin.52.1.8/pdf.



**44%** of Washington female patients are receiving Pap tests too frequently.

<sup>&</sup>lt;sup>8</sup> Choosing Wisely. American College of Obstetricians and Gynecologists. Don't perform routine annual cervical cytology screening (Pap tests) in women 30 – 65 years of age. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/clinician-lists/american-college-obstetricians-gynecologists-annual-cervical-cytology-in-women-30-to-65/</u>.

<sup>&</sup>lt;sup>9</sup> Smith RA, Cokkinides V, von Eschenbach AC et al. American Cancer Society Guidelines for the Early Detection of Cancer. Accessed July 19, 2016 at:

<sup>&</sup>lt;sup>10</sup> US Preventive Service Task Force Cervical Cancer Screening. Accessed July 19, 2016 at:

http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancerscreening.

<sup>&</sup>lt;sup>11</sup> American College of Obstetricians and Gynecology. Well-Woman Visit. Accessed July 19, 2016 at: <u>http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Well-Woman-Visit</u>.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



percentage point difference between the best and worst performing counties. The reason for the widening of this variation is that the best performing county dropped down to 29 percent (previously the best performing county was 47 percent); however, the upper rate stayed about the same, with the worst performing county at 67 percent (previously at 68 percent).

By comparison, the variation among Medicaid enrollees was consistent with previous data but remains high with a 39 percentage point difference between the best and worst performing counties (previously a 40 percentage point difference).

#### Table 3. Female patients with too-frequent Pap tests

The percentage of female patients who received too-frequent Pap tests in Washington state, comparing best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	45%	29% in Klickitat	67% in Garfield
Medicaid	33%	10% in Clark	49% in Spokane
All-Payer	44%		

#### Figure 7. Female patients with too-frequent Pap tests, commercial

The percentage of commercially insured female patients who had too- frequent Pap tests, compared by the **commercial average of 45%**.\*





#### Figure 8. Female patients with too-frequent Pap tests, Medicaid

The percentage of Medicaid-insured female patients who had too-frequent Pap tests, compared to the **Medicaid average of 33%**.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

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## Pap tests for patients with previous hysterectomy

**Choosing Wisely recommendation:** Don't perform Pap test on women who had a hysterectomy for non-cancer disease.<sup>12</sup>

#### Why it matters

A hysterectomy is a very common type of surgery to remove the uterus. Often a woman's fallopian tubes, ovaries and cervix are also removed (a total hysterectomy).<sup>13</sup> Pap tests screen for cervical cancer and have not been found beneficial in women who have had a non-cancer related hysterectomy.<sup>14</sup>

## *Clinical note:* Pap tests are recommended for patients with a hysterectomy who have a history of cervical cancer.<sup>+</sup>

#### **Findings**

As seen in table 4 on the following page, the all-payer rate for patients who previously had a hysterectomy and who received a potentially unnecessary Pap test is 13 percent. This represents an improvement from the 2011–2012 data, which found an all-payer rate of 17 percent. The rates for different insurance types are fairly close to each other, with commercial at 13 percent and Medicaid at 15 percent.

The variation found across the counties has improved. The variation among commercially insured women is a 17 percentage point difference between the best and worst performing county (previously 25 percentage point difference). For Medicaid enrollees, the current variation is largely unknown because there are not enough cases in most counties to identify results that are statistically higher or lower than the state average. In the 2011–2012 results for Medicaid enrollees, there was a 25 percentage point difference between the best and worst performing counties. As seen in figure 10, most counties are in grey, indicating that there are not enough reportable cases. This is not uncommon when looking at a specific subset of the population. In this case, the female patients who previously had a hysterectomy for a non-cancer related disease during the measurement year.



**13%** of Washington female patients with previous hysterectomy received potentially unnecessary Pap tests.

<sup>&</sup>lt;sup>12</sup> Choosing Wisely. American Academy of Family Physicians. Don't perform Pap smears on women younger than 21 or who have had a hysterectomy for non-cancer disease. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/societies/american-academy-of-family-physicians/</u>.

NOTE: recommendation is split into two measures = under 21 and hysterectomy

<sup>&</sup>lt;sup>13</sup> American College of Obstetrics and Gynecology. Hysterectomy. Accessed July 19, 2016 at: <u>http://www.acog.org/Patients/FAQs/Hysterectomy#what</u>.

<sup>&</sup>lt;sup>14</sup> US Preventive Service Task Force. Cervical Cancer: Screening. Accessed July 19, 2016 at: <u>http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-</u> screening.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 4. Pap tests for women with previous hysterectomy

The percentage of female patients who have previously had hysterectomy and received potentially unnecessary Pap tests in Washington, compared comparing best and worst performing counties in the 2013-2014 measurement year.\*

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	13%	2% in Douglas	19% in Benton, Clark, Spokane
Medicaid	15%	2% in Snohomish	*
All-Payer	13%		

\*No county had a rate that was statistically lower than the state average for the Medicaid population.

#### Figure 9. Pap tests for women with previous hysterectomy, commercial

The percentage of commercially insured female patients with previous hysterectomy who had potentially unnecessary Pap tests, compared to the **commercial average of 13%**.\*





#### Figure 10. Pap tests for women with previous hysterectomy, Medicaid

The percentage of Medicaid-insured female patients with previous hysterectomy who had potentially unnecessary Pap tests, compared to the **Medicaid average** of 15%.\*





# Pap tests for women under 21 years old

**Choosing Wisely recommendation:** Don't perform Pap smears on women younger than 21.<sup>15</sup>

#### Why it matters

The chances of healthy young women getting cervical cancer is low and most observed abnormalities found in Pap tests in women under 21 years old resolve spontaneously.<sup>16</sup> Evidence shows that the expected harms (such as false positives leading to unnecessary procedures and possible problems with future pregnancies) of screening this population outweigh the potential benefits.<sup>17</sup>

**Clinical note:** For patients under 21 years of age who have a history of cancer or certain symptoms, a Pap test may be needed.<sup>†</sup>

#### **Findings**

As seen in table 5 below, the all-payer average is one percent of young female patients who received a potentially unnecessary Pap test. This represents an improvement from the previous 2011-2012 data that found a four percent all-payer rate. The rates for commercial and Medicaid are also low, 1.3 percent and 0.9 percent, respectively. The variation across counties is also relatively low, with commercial enrollees finding a seven percentage point difference between best and worst performing counties and only a five percentage difference for Medicaid enrollees.

**<sup>1%</sup>** of Washington female patients under the age of 21 received potentially unnecessary Pap tests.

<sup>&</sup>lt;sup>15</sup> Choosing Wisely. American Academy of Family Physicians. Don't perform Pap smears on women younger than 21 or who have had a hysterectomy for non-cancer disease. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/societies/american-academy-of-family-physicians/</u>. *NOTE: recommendation is split into two measures= under 21 and hysterectomy.* 

 <sup>&</sup>lt;sup>16</sup> American Academy of Family Physicians. Choosing Wisely. Pap Smears. Accessed July 19, 2016 at: <a href="http://www.aafp.org/patient-care/clinical-recommendations/all/cw-pap-smears.html">http://www.aafp.org/patient-care/clinical-recommendations/all/cw-pap-smears.html</a>.
 <sup>17</sup> US Preventive Services Task Force U.S. Preventive Services Task Force Issues New Cervical Cancer

<sup>&</sup>lt;sup>17</sup> US Preventive Services Task Force U.S. Preventive Services Task Force Issues New Cervical Cancer Screening Recommendations. Accessed July 19, 2016 at:

http://www.uspreventiveservicestaskforce.org/Page/Name/us-preventive-services-task-force-issues-new-cervical-cancer-screening-recommendations.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 5. Pap tests for women under 21 years old

The percentage of female patients under the age of 21 who received potentially unnecessary Pap tests in Washington state, comparing best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	1.3%	0% in Ferry, Klickitat and Pend Oreille	7% in Asotin
Medicaid	0.9%	0% in Adams, Chelan, Clark, Jefferson, Garfield, Grant, Snohomish, Wahkiakum	5% in Asotin and Lincoln
All-Payer	1%		

#### Figure 11. Pap tests for women under 21 years old, commercial

The percentage of commercially insured female patients under the age of 21 who had potentially unnecessary Pap tests, compared to the **commercial average** of 1.3%.\*





#### Figure 12. Pap tests for women under 21 years old, Medicaid

The percentage of Medicaid-insured female patients under the age of 21 who had potentially unnecessary Pap tests, compared to the **Medicaid average of 0.9%**.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

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# Follow-up imaging for adnexal (ovarian) cysts

**Choosing Wisely recommendation:** Don't recommend follow-up imaging (CT, MRI, or positron emission tomography [PET]) for clinically inconsequential adnexal cysts.<sup>18</sup>

#### Why it matters

Adnexal cysts, or cysts found in the fallopian tubes and ovaries, can be benign or malignant (cancerous) and often are formed during a woman's menstrual cycle. They do not generally cause symptoms and are sometimes found during routine pelvic exams.

Doctors commonly evaluate adnexal cysts with a vaginal ultrasound to see if they are cancerous. The American College of Obstetricians and Gynecologists states that no other imaging technique has been found to be superior to ultrasonography for overall accuracy; therefore, ultrasonography is the only one recommended for routine use.<sup>19</sup> Follow-up imaging tests such as CT, MRI, and PET do not provide any additional information to the doctor for inconsequential cysts, or non-cancerous cysts smaller than five centimeters.<sup>20</sup>

**Clinical note:** In cases where the initial test revealed worrisome results about the size or features of the cyst, a follow-up imaging test such as CT, MRI or PET may be needed.<sup> $\dagger$ </sup>

#### **Findings**

As seen in table 6 below, the all-payer average of patients with a simple adnexal cyst who received a potentially unnecessary follow-up imaging test such as CT, MRI or PET is 42 percent. Results slightly worsened from the 2011–2012 findings, where the statewide, all-payer average was 39 percent, the commercial rate was 37 percent, and the Medicaid rate stayed the same at 41 percent. Interestingly, the new results show that the commercial and Medicaid rates are close to each other. The variation in county rates is also similar across commercial and Medicaid ranging between 19 to 65 percent and Medicaid ranging between 17 and 65 percent. Though it is good to see that the payer type is not influencing practice behavior, the high rates and wide variation leave plenty of room for improvement.

**42%** of Washington patients with simple adnexal cysts had potentially unnecessary follow-up imaging tests.

<sup>&</sup>lt;sup>18</sup> Choosing Wisely. American College of Radiology. Don't recommend follow-up imaging for clinically inconsequential adnexal cysts. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/clinicianlists/american-college-radiology-follow-up-imaging-for-adnexal-cysts/</u>.

<sup>&</sup>lt;sup>19</sup> American Family Physician. ACOG Releases Guidelines on Management of Adnexal Masses. Accessed July 19, 2016 at: <u>http://www.aafp.org/afp/2008/0501/p1320.html</u>.

<sup>&</sup>lt;sup>20</sup> Choosing Wisely. Imaging Tests for Ovarian Cysts. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/patient-resources/imaging-tests-for-ovarian-cysts/</u>.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 6. Patients with adnexal cysts who had unnecessary imaging

The percentage of patients with simple adnexal cysts who had potentially unnecessary follow-up imaging tests in Washington state, comparing best and worst performing counties the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY		
Commercial	42%	19% in Whatcom	65% in Clallam and Whitman		
Medicaid	41%	17% in Yakima	65% in Lewis		
All-Payer	42%				

## Figure 13. Patients with adnexal cysts who had unnecessary imaging, commercial

The percentage of commercially insured patients with simple adnexal cysts who had potentially unnecessary follow-up imaging tests, compared to the **commercial average of 42%**.\*





## Figure 14. Patients with adnexal cysts who had unnecessary imaging, Medicaid

The percentage of Medicaid-insured patients with simple adnexal cysts who had potentially unnecessary follow-up imaging tests, compared to the **Medicaid** *average of 41%*.\*





## Imaging for uncomplicated low-back pain

**Choosing Wisely recommendation:** Don't do imaging for low-back pain within six weeks\* of diagnosis unless red flags are present.<sup>21</sup>

#### Why it matters

Low-back pain is the most common cause of job-related disability and a leading contributor to missed work, with about 80 percent of American adults experiencing low-back pain at some point in their lives.<sup>22</sup>

The good news is that low-back pain often goes away on its own within a month. Imaging tests, such as X-rays and CTs, do not help in the diagnosis or treatment of uncomplicated low-back pain. In fact, such tests increase risk to the patient from radiation exposure which can cause cell damage that leads to cancer.<sup>23</sup> In addition, studies have shown that many abnormalities shown on imaging tests are common and not clinically significant. When imaging is done prematurely, incidental findings may lead to inaccurate diagnosis, increased patient anxiety and unnecessary tests or treatments.

Moreover, current prices for imaging tests in Washington state range from \$80 to \$1,120.  $^{\rm 24}$ 

**Clinical note:** Imaging for low back pain may be needed when there are signs of nerve damage or a serious underlying problem exists, such as cancer or other "red flags" identified by a doctor.<sup>†</sup>

#### **Findings**

As seen in table 7 below, the all-payer average for patients with uncomplicated low-back pain who received an unnecessary imaging test in Washington state is 20 percent. This rate, unfortunately, marks a higher (worse) rate than what was found in the 2011-2012 results, where the state average was 14 percent. The higher rates are found for both commercial at 19 percent (previously 13 percent) and Medicaid at 21 percent (previously 15 percent).

The reasons for the increased rate are unknown. One potential explanation may be that attention is being paid to a larger array of appropriateness issues which has led to a decreased amount of focus to improve appropriate imaging for uncomplicated low-back pain. 20% of Washington patients with low-back pain had potentially unnecessary imaging within six weeks of diagnosis.

<sup>&</sup>lt;sup>21</sup> Choosing Wisely. American Academy of Family Physicians. Imaging Tests for Back Pain.

Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/patient-resources/imaging-tests-for-back-pain/</u>. \*NOTE: The Choosing Wisely Task Force selected the nationally recognized HEDIS measure which measures at four weeks, instead of six weeks.

<sup>&</sup>lt;sup>22</sup> National Institute of Neurological Disorders and Stroke. Low Back Pain Fact Sheet. Accessed July 19, 2016 at: <u>http://www.ninds.nih.gov/disorders/backpain/detail\_backpain.htm</u>.

<sup>&</sup>lt;sup>23</sup> NIH National Cancer Institute. Cancer-Cases and Prevention-Risk Factors. Accessed July 19, 2016 at: <u>http://www.cancer.gov/about-cancer/causes-prevention/risk/radiation</u>.

<sup>&</sup>lt;sup>24</sup> Healthcare Bluebook. Accessed July 19, 2016 at: healthcarebluebook.com.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 7. Imaging for uncomplicated low-back pain

The percentage of patients with uncomplicated low-back pain who received a potentially unnecessary imaging test in Washington state, comparing the best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	19%	8% in Jefferson	25% in Yakima
Medicaid	21%	10% in Walla Walla	*
All-Payer	20%		

\*No county had a rate that was statistically lower than the state average for the Medicaid population.

#### Figure 15. Imaging for uncomplicated low-back pain, commercial

The percentage of commercially insured patients with uncomplicated low-back pain who had potentially unnecessary imaging tests, compared to the **commercial** average of 19%.\*





#### Figure 16. Imaging for uncomplicated low-back pain, Medicaid

The percentage of Medicaid-insured patients with uncomplicated low-back pain who had potentially unnecessary imaging tests, compared to the **Medicaid** average of 21%.\*



Rating Symbol TOO FEW CASES (<30) WORSE THAN STATE AVERAGE MEETS STATE AVERAGE BETTER THAN STATE AVERAGE

\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

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## Imaging for simple syncope (fainting)

**Choosing Wisely recommendation:** In the evaluation of simple syncope and normal neurological examination, don't obtain brain imaging studies (CT or MRI).<sup>25</sup>

#### Why it matters

Syncope is the medical term for a temporary loss of consciousness. Commonly called fainting or passing out, syncope is caused from decreased blood flow to the brain such as from low blood pressure.

Simple syncope refers to a fainting episode that does not have other neurological or problematic symptoms. While fainting can be alarming, people generally recover completely within minutes.<sup>26</sup>

According to the American College of Physicians, the outcomes for patients with simple syncope without other symptoms such as symptoms of stroke, changes in mental state or ongoing vomiting, are not improved through the use of imaging. Imaging tests pose physical and financial risks. The decision to perform imaging should be carefully considered to ensure the potential benefits outweigh the harm.

**Clinical note:** Imaging may be needed if syncope is accompanied by a history suggesting a neurologic event.<sup> $\dagger$ </sup>

#### **Findings**

As seen in table 8 below, 23 percent of both commercial and Medicaid (allpayer) patients with syncope received a potentially unnecessary CT or MRI. Results improved slightly from the 2011–2012 findings, where the statewide, all-payer average was 26 percent, the commercial rate was 23 percent, and the Medicaid rate was 31 percent. In the 2013–2014 results, the variation among counties continues to be high. The largest gap is found among Medicaid patients, with a 32 percentage point difference between the best and worst performing counties (6 percent in Okanogan and 38 percent in Yakima, respectively).



**23%** of Washington patients with simple syncope had a potentially unnecessary CT or MRI.

<sup>&</sup>lt;sup>25</sup> Choosing Wisely. American College of Physicians. Accessed July 19, 2016 at:

http://www.choosingwisely.org/clinician-lists/american-college-physicians-brain-imaging-to-

evaluate-simple-syncope/.

<sup>&</sup>lt;sup>26</sup> American Family Physician. Evaluation of Syncope. Accessed July 19, 2016 at: <u>http://www.aafp.org/afp/2005/1015/p1492.html</u>.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 8. Imaging for simple syncope

The percentage of patients with syncope who received potentially unnecessary imaging tests in Washington state, comparing best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	22%	14% in Mason	25% in Pierce
Medicaid	26%	6% in Okanogan	38% in Yakima
All-Payer	23%		

#### Figure 17. Imaging for simple syncope, commercial

The percentage of commercially insured patients with simple syncope who had potentially unnecessary imaging tests, compared to the **commercial average** of 22%.\*





#### Figure 18. Imaging for simple syncope, Medicaid

The percentage of Medicaid-insured patients with simple syncope who had potentially unnecessary imaging tests, compared to the **Medicaid average of 26%**.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

#### Medicare results for imaging for syncope

The imaging for syncope measure is the third of three measures for which this report will show Medicare results provided by Qualis Health. At 23 percent, the statewide rate for Medicare enrollees is very similar to that seen in the commercial and Medicaid populations (22 percent and 26 percent, respectively). Overall, county-level rates for the Medicare population are generally lower than that for Medicaid enrollees, with the worst performing county at 29 percent (Lewis) for Medicare enrollees as compared with 38 percent (Yakima) for Medicaid enrollees. 23% of Medicare enrollees with simple syncope had potentially unnecessary CT or MRI.



#### Figure 19. Imaging for simple syncope, Medicare

The percentage of Medicare-insured patients with simple syncope who had potentially unnecessary imaging tests, compared to the **Medicare average** of 23%.\*



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

For more about the Alliance: www.WashingtonHealthAlliance.org



## CT for appendicitis

**Choosing Wisely recommendation:** Don't do CT for evaluation of suspected appendicitis in children until after ultrasound has been considered.<sup>27</sup>

#### Why it matters

Appendicitis is an inflammation of the appendix. The appendix can become infected and rupture, releasing the infection into the abdominal cavity. In the United States, appendicitis affects approximately 70,000 children every year and is the leading cause for emergency abdominal surgery for children.<sup>28</sup>

Reducing radiation exposure in children is especially important because children have a greater risk of radiation-related cancer than adults. Children are particularly vulnerable to radiation as their bodies are still developing and they have a longer life expectancy than adults, resulting in a larger window of opportunity for radiation damage.<sup>29</sup>

According to the American College of Radiology, ultrasound is the recommended initial test to diagnose appendicitis, with an accuracy of 94 percent. A CT should only be considered after an ultrasound has been performed and more information is needed. This reduces unnecessary radiation exposure for children and is also more cost effective, as ultrasounds do not use radiation and are about half the price of CT.<sup>30</sup>

**Clinical note:** A follow-up CT may be necessary if the results from an ultrasound are unclear and additional information is needed.<sup> $\dagger$ </sup>

#### **Findings**

As seen in table 9 below, the all-payer average for children with appendicitis who received a potentially unnecessary CT is 24 percent. This marks an improvement from the 2011-2012 findings, where the all-payer, statewide average was 30 percent, the commercial rate was 30 percent, and the Medicaid rate was 31 percent. Yakima county improved its rate by 12 percentage points, from to 55 percent in 2011-2012 to 43 percent. Because the volume of cases for the measure continues to be low, many counties have too few cases to publicly report on at a county. 24% of Washington children with appendicitis had potentially unnecessary CT.

<sup>&</sup>lt;sup>27</sup> Choosing Wisely. American College of Radiology. Accessed July 19, 2016 at: <u>http://www.choosingwisely</u>.org/clinician-lists/american-college-radiology-ct-to-evaluate-appendicitis-in-children/.

<sup>&</sup>lt;sup>28</sup> Walsh, D. Society of American Gastrointestinal and Endoscopic Surgeons. Pediatric Appendicitis Accessed July 19, 2016 at: <u>http://www.sages.org/wiki/pediatric-appendicitis/</u>.

<sup>&</sup>lt;sup>29</sup> NIH National Cancer Institute. Radiation Risks and Pediatric Computed Tomography (CT): A Guide for Health Care Providers. Accessed July 19, 2016 at: <u>http://www.cancer.gov/about-cancer/causesprevention/risk/radiation/pediatric-ct-scans.</u>
<sup>30</sup> Collector RC, Kacher KA, Burr, PL, Charles, KA, Burr, PL, Cha

<sup>&</sup>lt;sup>30</sup> Callaghan BC, Kerber KA, Pace RJ, Skolarus LE, Burke JF. Headaches and Neuroimaging: High Utilization and Costs Despite Guidelines. JAMA Intern Med. 2014;174(5):819-821. doi:10.1001/jamainternmed.2014.173. Accessed July 19, 2016 at:

https://archinte.jamanetwork.com/article.aspx?articleid=1835347.

<sup>&</sup>lt;sup>+</sup> Clinical note provided by Christopher Dale, MD, MPH, Medical Director Quality and Value, Swedish Medical Group and Matt Handley, MD, Medical Director, Quality, Group Health Cooperative.



#### Table 9. CT for appendicitis

The percentage of children with appendicitis who received potentially unnecessary CT in Washington state, comparing best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY
Commercial	22%	13% in King	*
Medicaid	25%	**	43% in Yakima
All-Payer	24%		

\*No county had a rate that was statistically lower than the state average for the commercial population.

\*\* No county had a rate that was statistically higher than the state average for the Medicaid population.

#### Figure 20. CT for appendicitis, commercial

The percentage of commercially insured children with appendicitis who received potentially unnecessary CT, compared to the **commercial** average of 22%.\*





#### Figure 21. CT for appendicitis, Medicaid

The percentage of Medicaid-insured children with appendicitis who received potentially unnecessary CT, compared to the **Medicaid average of 25%**.\*



## Spirometry testing for asthma

**Choosing Wisely recommendation:** Don't diagnose or manage asthma without spirometry.<sup>31</sup>

#### Why it matters

Asthma is a long-term lung disease that irritates the lining of the air passages causing them to swell, narrowing and reducing the flow of air in and out of the lungs. Asthma causes recurring periods of wheezing, chest tightness, shortness of breath and coughing.<sup>32</sup> With more than half a million Washington patients suffering from asthma, the Centers for Disease Control (CDC) identifies adult prevalence of asthma in Washington as higher than the United States average and as one of the highest in the nation.<sup>33</sup> Asthma causes adults to miss nearly 200,000 days of work each year and as many as 14 percent of adult asthmatics cannot afford their asthma medication.<sup>34</sup> Each year, more than 5,000 Washingtonians with asthma are hospitalized and more than 80 die of asthma every year (one every five days).<sup>35</sup>

Unlike the previous Choosing Wisely recommendations, this measure looks at the underuse of effective care: using spirometry to diagnose and manage asthma. Spirometry is a lung function test that helps clinicians to better pinpoint the type and complexity of each patient's asthma condition, therefore informing the provider of the best treatment options and, ultimately, providing optimal care for the patient.<sup>36</sup>

#### **Findings**

The spirometry measure looks at those patients who did not receive a recommended health care service, in this case a spirometry test. Though this measure is not an "avoidance" measure, it does help bring into focus the broader scope of the Choosing Wisely campaign and goal of the Washington State Choosing Wisely Task Force—which is to encourage conversations between physicians and patients and examine all health care services and processes to ensure appropriate and proper care.

As seen in table 10 below, the all-payer average is 75 percent of patients 11 years and older who did *not* have a spirometry test within three years of being diagnosed with asthma in Washington state. Considering that a recommended spirometry test is only occurring a quarter of the time, there



#### **75%** of Washington patients were diagnosed with asthma *without* the recommended spirometry test.

<sup>&</sup>lt;sup>31</sup> Choosing Wisely. American Academy of Allergy, Asthma & Immunology. Don't diagnose or manage asthma without spirometry. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/clinician-lists/american-academy-allergy-asthma-immunology-spirometry-for-asthma-diagnosis-and-management/</u>.

<sup>&</sup>lt;sup>32</sup> NIH. What Is Asthma? Accessed July 19, 2016 at: <u>http://www.nhlbi.nih.gov/health/health-topics/topics/asthma</u>.

<sup>&</sup>lt;sup>33</sup> CDC. Asthma in Washington. Accessed July 19, 2016

at: http://www.cdc.gov/asthma/stateprofiles/Asthma in WA.pdf.

<sup>&</sup>lt;sup>34</sup> Washington State Department of Health. Asthma Data. Asthma Rates in Washington. Accessed July 19, 2016 at: http://www.doh.wa.gov/DataandStatisticalReports/Diseasesand ChronicConditions/AsthmaData.

<sup>&</sup>lt;sup>35</sup> Washington State Department of Health. The Burden of Asthma in Washington State. 2013. Accessed July 19, 2016 at: <u>http://www.doh.wa.gov/portals/1/documents/pubs/345-240-</u>

asthmaburdenrept13.pdf.

<sup>&</sup>lt;sup>36</sup> Choosing Wisely. American Academy of Allergy, Asthma & Immunology. Accessed July 19, 2016 at: <u>http://www.choosingwisely.org/societies/american-academy-of-allergy-asthma-immunology/</u>.



is room for significant improvement. Results are similar to the 2011–2012 findings, where the statewide, all-payer average was 74 percent, the commercial rate was 72 percent and the Medicaid rate was 78 percent. The latest findings show that the variation among counties is high across payer types, with a 25 percentage point difference between the best performing county (Whatcom at 66 percent among commercially insured enrollees) and worst performing county (Okanogan at 91 percent among Medicaid-insured enrollees).

#### Table 10. Spirometry to diagnose asthma

The percentage of patients 11 years and older who did **not** have spirometry tests within three years of being diagnosed with asthma, comparing best and worst performing counties in the 2013-2014 measurement year.

PAYER TYPE	WASHINGTON STATE AVERAGE	BEST PERFORMING COUNTY	WORST PERFORMING COUNTY		
Commercial	73%	66% in Whatcom	88% in Klickitat		
Medicaid	79%	69% in Lewis	91% in Okanogan		
All-Payer	75%				

#### Figure 22. Spirometry to diagnose asthma, commercial

The percentage of commercially insured patients 11 years and older who did **not** have spirometry tests within three years of being diagnosed with asthma, compared to the **commercial average of 73%**.





#### Figure 23. Spirometry to diagnose asthma, Medicaid

The percentage of Medicaid-insured patients 11 years and older who did **not** have spirometry tests within three years of being diagnosed with asthma, compared to the **Medicaid average of 79%**.



\*More information on the statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 44-46.

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#### Table 11. County-level results for the commercially insured population

Washington state results for the 10 Choosing Wisely measures by county, 2013–2014.\*\*

	Antibiotics for URI	Imaging for uncompli- cated headache	Too frequent Pap tests	Pap tests, patients with hysterec- tomies	Pap tests, women younger than 21	Imaging for adnexal cysts	lmaging for low- back pain	Imaging for simple syncope (fainting)	Imaging for appendicitis	Diagnosing asthma without spirometry
State	30%	20%	45%	13%	1.3%	42%	19%	22%	22%	73%
Average	2.40/	270/	E C 0/	*	00/	*	4.00/	*	*	700/
Adams	34%	27%	55%	*	0%	*	*	*	*	/8%
Asotin	46%	15%	61%	т 1.00/	7%		1.00/	250/	*	83%
Benton	35%	25%	52%	19%	2% 10/	20%	19%	25% 10%	*	
Chellam	30%	20%	47%	0% 1,0%	1%	29%	14%	18%	*	80%
Clark	30%	20%	40%	10%	1%	00%	17%	23%	*	0U%
Cidrk	Z7%	19%	47% 64%	*	1%	41% *	*	×	*	74%
Condita	43%	100/	04 <i>7</i> 0	00/	Z 70 1 0/	E 00/	160/	7.40/	*	79% 770/
Douglas	52% 2 <b>2</b> %	19%	J170 //E0/	070	10/	30% *	10%	24%	*	0 / 0/
Douglas	52% //10/	*	45%	× 70	1%	*	*	*	*	04% 90%
Ferry	41%	270/	59%	1 00/	20%		100/	7.40/	*	0Z70 710/
Garfield	56%	*	67%	*	*	*	*	×	*	*
Gameiu	26%	12%	Δ <i>1</i> %	1 70/	1 0/	220/	19%	25%	*	70%
Grave Harbor	/3%	10%	57%	12/0	2%	2270	20%	2370	*	87%
Island	26%	21%	/1%	0%	270	52%	18%	16%	*	75%
lefferson	23%	16%	36%	2/%	1%	39%	8%	23%	*	7/%
King	25%	19%	/2%	1/1%	1%	18%	18%	2370	13%	74%
Kitsan	37%	24%	42%	13%	1%	37%	18%	21%	*	71%
Kittitas	32%	26%	52%	13%	1%	20%	19%	20%	*	67%
Klickitat	29%	1/1%	29%	*	0%	*	*	*	*	88%
	42%	19%	47%	13%	1%	63%	11%	27%	*	74%
Lincoln	52%	19%	61%	*	4%	*	*	*	*	73%
Mason	30%	19%	40%	13%	2%	55%	17%	14%	*	77%
Okanogan	27%	17%	37%	11%	2%	*	22%	22%	*	79%
Pacific	42%	15%	54%	*	6%	*	*	*	*	66%
Pend Oreille	46%	17%	48%	*	0%	*	*	*	*	68%
Pierce	32%	23%	46%	13%	2%	33%	23%	25%	18%	73%
San Juan	23%	16%	45%	*	2%	*	11%	*	*	80%
Skagit	35%	20%	50%	8%	1%	39%	21%	25%	*	72%
Skamania	25%	*	36%	*	*	*	*	*	*	*
Snohomish	28%	20%	43%	10%	1%	44%	22%	22%	24%	72%
Spokane	35%	22%	54%	19%	2%	31%	20%	22%	*	79%
Stevens	41%	23%	51%	14%	1%	*	23%	17%	*	73%
Thurston	30%	20%	38%	10%	1%	46%	18%	22%	*	73%
Wahkiakum	48%	*	*	*	*	*	*	*	*	*
Walla Walla	32%	21%	59%	9%	1%	42%	21%	15%	*	79%
Whatcom	33%	21%	50%	8%	1%	19%	17%	19%	*	66%
Whitman	34%	17%	48%	15%	2%	65%	17%	17%	*	80%
Yakima	43%	22%	49%	12%	1%	21%	25%	23%	*	74%

Results from the statistical testing are indicated by the following colors: Green: better than state average; Red: worse than state average; Yellow: meets state average.

\*Indicates counties with too few cases (<30).



#### Table 12. County-level results for the Medicaid-insured population

Washington state results for the 10 Choosing Wisely measures by county, 2013-2014.\*\*

	Antibiotics for URI	Imaging for uncompli- cated headache	Too frequent Pap tests	Pap tests, patients with hysterec- tomies	Pap tests, women younger than 21	Imaging for adnexal cysts	lmaging for low - back pain	Imaging for simple syncope (fainting)	Imaging for appendicitis	Diagnosing asthma without spirometry
State Average	16%	23%	33%	15%	0.9%	41%	21%	26%	25%	79%
Adams	15%	17%	22%	*	0%	*	*	*	*	87%
Asotin	26%	32%	36%	*	5%	*	*	*	*	83%
Benton	24%	26%	37%	19%	2%	47%	26%	34%	*	78%
Chelan	14%	14%	19%	*	0%	*	*	7%	*	86%
Clallam	15%	19%	38%	*	1%	54%	28%	11%	*	85%
Clark	10%	35%	10%	*	0%	29%	*	29%	*	79%
Columbia	36%	*	*	*	2%	*	*	*	*	*
Cowlitz	11%	30%	29%	*	1%	*	13%	18%	*	75%
Douglas	11%	9%	18%	*	1%	*	*	*	*	89%
Ferry	26%	*	*	*	1%	*	*	*	*	89%
Franklin	19%	20%	24%	*	1%	45%	*	23%	*	79%
Garfield	51%	*	*	*	0%	*	*	*	*	*
Grant	17%	18%	29%	*	0%	32%	*	20%	*	88%
Grays Harbor	27%	21%	40%	*	2%	*	*	28%	*	77%
Island	18%	42%	*	*	1%	*	*	*	*	81%
Jefferson	*	*	*	*	0%	*	*	*	*	*
King	12%	23%	29%	14%	1%	52%	15%	30%	20%	78%
Kitsap	13%	31%	37%	20%	1%	34%	21%	34%	*	73%
Kittitas	14%	34%	41%	*	2%	*	*	*	*	82%
Klickitat	13%	27%	30%	*	1%	*	*	*	*	77%
Lewis	30%	14%	42%	*	1%	65%	26%	32%	*	69%
Lincoln	42%	24%	*	*	5%	*	*	*	*	82%
Mason	16%	24%	32%	*	2%	*	*	*	*	80%
Okanogan	18%	14%	26%	*	1%	*	*	6%	*	91%
Pacific	27%	18%	33%	*	0%	*	*	*	*	77%
Pend Oreille	19%	*	41%	*	2%	*	*	*	*	79%
Pierce	16%	23%	39%	14%	1%	37%	25%	27%	23%	75%
San Juan	10%	*	*	*	2%	*	*	*	*	*
Skagit	12%	16%	26%	*	1%	*	*	17%	*	82%
Skamania	14%	17%	*	*	2%	*	*	*	*	83%
Snohomish	15%	27%	25%	2%	0%	48%	13%	24%	21%	80%
Spokane	20%	24%	49%	17%	2%	41%	21%	23%	23%	81%
Stevens	21%	27%	40%	*	1%	*	*	*	*	83%
Thurston	14%	22%	34%	23%	1%	44%	23%	25%	*	82%
Wahkiakum	*	*	*	*	0%	*	*	*	*	*
Walla Walla	18%	18%	43%	*	1%	*	10%	12%	*	83%
Whatcom	14%	27%	38%	*	1%	30%	13%	25%	*	72%
Whitman	21%	25%	27%	*	3%	*	*	*	*	81%
Yakima	17%	23%	24%	*	1%	17%	14%	38%	43%	86%

Results from the statistical testing are indicated by the following colors: Green: better than state average; Red: worse than state average; Yellow: meets state average.

\*Indicates counties with too few cases (<30).



#### Table 13. County-level results for the Medicare-insured population

Washington state results for 3 Choosing Wisely measures by county, 2014-2015.\*\*

	Antibiotics for URI	Imaging for uncomplicated headache	Imaging for simple syncope (fainting)		
State	28%	21%	23%		
Average					
Adams	31%	14%	20%		
Asotin	35%	12%	13%		
Benton	30%	19%	28%		
Chelan	34%	20%	27%		
Clallam	27%	20%	19%		
Clark	25%	19%	23%		
Columbia	*	*	*		
Cowlitz	34%	22%	24%		
Douglas	23%	17%	16%		
Ferry	*	*	*		
Franklin	26%	21%	22%		
Garfield	*	*	*		
Grant	33%	19%	19%		
Grays Harbor	32%	21%	23%		
Island	24%	22%	20%		
Jefferson	33%	9%	22%		
King	24%	21%	25%		
Kitsap	30%	18%	20%		
Kittitas	33%	27%	27%		
Klickitat	*	4%	6%		
Lewis	28%	23%	29%		
Lincoln	*	20%	13%		
Mason	31%	18%	14%		
Okanogan	33%	10%	8%		
Pacific	29%	17%	26%		
Pend Oreille	*	*	*		
Pierce	30%	23%	28%		
San Juan	18%	26%	25%		
Skagit	29%	20%	26%		
Skamania	*	*	*		
Snohomish	28%	23%	22%		
Spokane	31%	22%	19%		
Stevens	28%	25%	25%		
Thurston	32%	22%	22%		
Wahkiakum	*	*	*		
Walla Walla	27%	21%	20%		
Whatcom	28%	26%	22%		
Whitman	42%	12%	13%		
Yakima	33%	23%	20%		

Results from the statistical testing are indicated by the following colors: Green: better than state average; Red: worse than state average; Yellow: meets state average. \*Indicates counties with too few cases (<30).

More information on the measures, data and statistical analysis and a full description of Medicare data is available at <u>Qualis Health</u>.

For the Community Checkup report: www.WACommunityCheckup.org



### Interpreting the results

#### About the measures

At present, there are no nationally standardized measures for the Choosing Wisely recommendations, leaving each individual organization without the ability to easily collect and measure their own data or to benchmark their performance against other provider organizations. For this reason, the WSMA and WSHA Medical Officer Collaborative identified an opportunity to partner with Premera Blue Cross, which was in the early stage of developing measure specifications, and the Washington Health Alliance, which could run the measures through their database to provide statewide results.

The Washington State Choosing Wisely Task Force, with the help of Alliance staff, refined the measures into technical specifications and split one of the recommendations into two measures: Pap tests for women with a hysterectomy and for women under 21 years of age. Furthermore, after detailed discussions, the Choosing Wisely Task Force decided to align the timeframe in the low-back pain measure (six weeks versus four weeks) to the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS) metric.

The Alliance then took the technical specifications finalized by the Choosing Wisely Task Force and applied them to its database of 4 million lives in Washington state to produce the county-level, statewide results included in this report.<sup>37</sup> Qualis Health also applied the technical specifications to its database of over 830,000 lives. A full description of Medicare data provided by Qualis Health may be found at www.Medicare.QualisHealth.org/ChoosingWisely.

The measure logic included in this document has not been vetted by certified measurement organizations (other than low-back pain). Results are reported at the county-level, versus medical group or clinic level, due to the use of new, un-vetted measures. In its current state, it is intended for the sole purpose of sparking community discussion and measure refinement. Future measurement at the medical group or clinic level is a possibility. The detailed measure specifications used to produce results for this report are available upon request.

<sup>&</sup>lt;sup>37</sup> All of the Community Checkup data suppliers, with the exception of the Community Health Plan of Washington, participated in the Choosing Wisely report.



#### **MEASURE DESCRIPTIONS**

The following is a brief description of each of the ten Choosing Wisely measures found in this report. More detailed information on the technical specifications is available upon request.

- Antibiotics for upper respiratory infections: The ratio of patients 18 years and older with an upper respiratory infection who were prescribed antibiotics within three days of the index (initial) visit, divided by the population of patients with an upper respiratory infection diagnosis.
  - 2014 measure description: Antibiotics for sinus infections: The ratio of patients who were prescribed antibiotics within 21 days of a primary diagnosis for acute sinusitis, divided by the population of patients with a primary diagnosis for acute sinusitis.
- **Imaging for uncomplicated headache:** The ratio of patients who received CT or MRI imaging within 30 days of the index (initial) visit, divided by the population of patients with a visit for a primary diagnosis of an acute headache.
- **Too frequent Pap tests:** The ratio of female patients who had a Pap test performed within the measurement year that was within 30 months from a prior Pap test, divided by the population of female patients who had a Pap test performed within the same measurement year.
- **Pap tests for patients with a previous hysterectomy:** The ratio of female patients who previously had a hysterectomy for a non-cancer related disease that had a Pap test performed within the measurement year, divided by the population of female patients who previously had a hysterectomy for a non-cancer related disease during the same measurement year.
- **Pap tests for young women under 21 years old:** The ratio of female patients between the ages of 13 to 20 years old who received a Pap test within the measurement year, divided by the population of female patients between the ages of 13 to 20 years old during the same measurement year.
- Imaging for uncomplicated low-back pain: The ratio of patients with a primary diagnosis of low back pain who received an imaging study (plain X-ray, MRI, CT) within 28 days (4 weeks) of diagnosis, divided by the population of patients with a primary diagnosis of low-back pain.
- **Imaging for simple syncope:** The ratio of patients with a primary diagnosis of syncope (code: 7802) who received a CT or MRI performed within 30 days of the initial diagnosis, divided by the population of patients with a primary diagnosis of syncope.
- **CT for appendicitis:** The ratio of patients under 18 years with a primary or secondary diagnosis of appendicitis who received a CT performed and who did not receive an ultrasound within 30 days prior to the index (initial) visit, divided by the population of patients under 18 years with a primary or secondary diagnosis of appendicitis.
- Adnexal Cysts: The ratio of patients with simple adnexal cysts (codes: 6200-2) who received a follow-up (two or more) echography imaging test within 60 days of the index (initial) visit, divided by the population of patients with simple adnexal cysts.
- **Spirometry testing for asthma:** The ratio of patients 11 years and older with a primary or secondary asthma diagnosis code who did not received a spirometry test performed within 3 years of the asthma diagnosis, divided by the population of patients 11 years and older with a primary or secondary asthma diagnosis code.



#### About the data

Since 2008, the Washington Health Alliance has produced the Community Checkup, an annual report on the quality of health care in Washington. The report relies upon a database containing claims data from approximately 4 million commercial and Medicaid enrollees from more than 20 different data suppliers (health plans, self-funded employers and labor union trusts).

The commercial and Medicaid population in this report represents those people who had full insurance benefits in the measurement year from July 1, 2013 to June 30, 2014. Measures that look beyond the measurement year include a look-back time period of January 1, 2004 to June 30, 2014.

Health plan enrollees were attributed to counties based on their residence zip code, not on where the care was provided. Health plan product type (Medicaid and commercial) is based upon the member's last enrollment during the measurement year. Member's age is based upon the member's last enrollment segment during the measurement year.

Findings were not adjusted for differences in age and gender distribution, except for those measures reported by age group and gender. A Wilson Score interval test, using a 90 percent confidence interval, was used to show statistically significant differences between variables.

The data in this report provides a unique "apples-to-apples" comparison across counties for both Medicaid and commercially insured residents, providing a useful overview of potential health care waste in Washington.

#### Understanding the maps

The statistically significant results can be found in the state maps in this report, with each county colored either red (worse than the state average), green (better than the state average) or yellow (the same as the state average). Counties that have denominators lower than 30 are suppressed and colored gray in the state maps.

Note: In order for a county to achieve a statistical better or worse rating, the county's rate and confidence interval must be completely outside (above and below) the state's confidence interval. This statistical methodology can result in confusion, for example when a county shows a higher rate than the state average but is not colored differently; this is because the difference is not statistically significant.

#### Limitations

The data used to create this report uses claims data and does not contain all the information that providers have in their medical record. For example, claims data sometimes lack information on past medical history or all laboratory results. Because the results are not accompanied by medical record chart review on the over 4 million covered lives included in this report, it is likely that some patients marked as receiving potentially unnecessary care may in fact have received care appropriately. Even with the measure specifications excluding the majority of these potential scenarios, a small margin of error is expected.



### Online resources

Providers, plans and patients have embraced the Choosing Wisely campaign, both in Washington and nationally. Many health care organizations in Washington are working to integrate Choosing Wisely recommendations into practice. More resources can be found in the links below. Please contact us to learn more about activities in Washington state.

#### **National resources**

- <u>Choosing Wisely</u>
  - <u>Specialty societies' recommendations</u>: complete list of Choosing Wisely recommendations
  - <u>Consumer Health Choices</u>: brochures and materials for providers and consumers

#### Washington resources

- Washington State Choosing Wisely Task Force
  - <u>Action Manual</u>: Integrating Choosing Wisely Recommendations into Practice: Guide for health care organizations interested in implementing Choosing Wisely recommendations
  - Videos from Choosing Wisely luncheon: local videos from the Fall 2013 kick-off event
- Washington Health Alliance
  - <u>Own Your Health</u>: a consumer website with Choosing Wisely information and resources
  - <u>Spotlight on Improvement</u>: Choosing Wisely articles as part of the Alliance's monthly Spotlight on Improvement series
- Washington State Medical Association
  - Know your Choices, Ask your Doctor: Choosing Wisely: a website for providers about Choosing Wisely resources
- Qualis Health
  - <u>Choosing Wisely in Washington</u>: Medicare data for the Choosing Wisely measures reflected herein



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### **Contact Information**

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#### ABOUT THE ALLIANCE

The Washington Health Alliance is a place where stakeholders work collaboratively to transform Washington state's health care system for the better. The Alliance brings together organizations that share a commitment to drive change in our health care system by offering a forum for critical conversation and aligned efforts by stakeholders: purchasers, providers, health plans, consumers and other health care partners. The Alliance believes strongly in transparency and offers trusted and credible reporting of progress on measures of health care quality and value. The Alliance is a nonpartisan 501(c)(3) nonprofit with more than 185 member organizations. A cornerstone of the Alliance's work is the Community Checkup, a report to the public comparing the performance of medical groups, hospitals and health plans and offering a community-level view on important measures of health care quality (www.wacommunitycheckup.org).

For the Community Checkup report: www.WACommunityCheckup.org