Less waste. Less harm.
Choosing Wisely® in Washington state

September 2014
www.wacommunitycheckup.org
September 2014

Dear Community Member:

We are pleased to release the Washington Health Alliance’s first report about Choosing Wisely®—a national program that identifies potential overuse of diagnostic tests or treatments. Choosing Wisely is an initiative of the American Board of Internal Medicine (ABIM) Foundation, with the goal of promoting conversations between providers and patients about choosing care that is appropriate and asking, “Is this necessary?”

The prevailing view in health care has been that more care equals better care. According to leading medical experts, as much as 30 percent of health spending is considered wasteful, not providing any benefits to patients. Furthermore, and as you will see in the report, many of these procedures are not only wasteful—costing time and money—but can also be harmful to patients.

Addressing this important issue is the Washington State Choosing Wisely Task Force, a group representing more than 20 of the largest health care organizations in our state. Formed in 2013, the Task Force is co-sponsored by the Alliance, the Washington State Medical Association, and the Washington State Hospital Association. Because there are currently no nationally vetted measures established to assess Choosing Wisely, the Task Force quickly set to work refining technical specifications provided generously by Premera Blue Cross and Group Health Cooperative. With providers facing limited resources across our state, it is even more important to have data inform and guide strategies to know where to focus efforts.

Since Choosing Wisely is a relatively new campaign—and a new approach to looking at health care quality—there has been debate around the size of the problem that each of the Choosing Wisely recommendations represent. This report provides a first look into some of the Choosing Wisely recommendations, informing this local and national discussion. The hope of the Alliance is that this report will spark discussions and initiatives so we can move to a new view in health care where smarter care equals 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. This project proves once again the power of partnerships to make an impact on health care, both at the local and national levels.

Nancy A. Giunto
Executive Director
Washington Health Alliance

1 Health Affairs

For more about the Alliance: www.WashingtonHealthAlliance.org
For the Community Checkup report: www.WACommunityCheckup.org
Table of Contents

Choosing Wisely® in Washington state 4
Results summary 6
  Imaging for uncomplicated headaches 9
  Antibiotics for sinus infections 12
  CT scans for sinus infections 14
  Imaging for uncomplicated low back pain 16
  Imaging for simple syncope (fainting) 19
  CT scans for appendicitis 22
  Too frequent Pap tests 24
  Pap tests for patients with a previous hysterectomy 26
  Pap tests for young women under 21 years old 29
  Follow-up testing for adnexal (ovarian) cysts 31
  Spirometry testing for asthma 34
Ranked and summary county-level results 36
Interpreting the results 41
Online resources 44
Acknowledgements and Contact information 45
Choosing Wisely® in Washington state

What is Choosing Wisely®?
Choosing Wisely® is an initiative of the American Board of Internal Medicine (ABIM) Foundation. The goal of Choosing Wisely is to help providers and patients have conversations about the overuse of tests and procedures and support provider efforts to help patients make smart and effective care choices.

In response to this challenge, a large number of national medical specialty societies have developed recommendations and asked providers and patients to “choose wisely.” The societies identified top five lists of tests or procedures commonly used in their field whose necessity should be questioned and discussed.

The resulting lists of Things Providers and Patients Should Question were designed to spark discussion about the need—or lack thereof—for many frequently ordered tests or treatments. These tests may represent waste in the medical system or tests or treatments whose benefits may not outweigh their risks.

Since the campaign was launched in 2012, it has quickly grown to include more than 300 recommendations from over 60 specialty medical societies each looking within their field for overused practices.

Choosing Wisely initiative in Washington state
In 2013, the Washington Health Alliance (the Alliance) and the Washington State Medical Association (WSMA) both received grants from the ABIM Foundation to support the Choosing Wisely campaign. The Alliance and WSMA have partnered 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 WSHA Medical Officer Collaborative provide ongoing senior leadership support for this important joint effort.

Washington State Choosing Wisely Task Force
One of the flagship projects of the initiative is the Washington State Choosing Wisely Task Force—a joint effort sponsored by the Alliance, WSMA and the Washington State Hospital Association (WSHA). The goal of the Task Force is to reduce wasteful care in Washington state.

2 Choosing Wisely
3 Health Affairs
Launching in November 2013, the Task Force represents medical leaders from more than 20 of the largest health care organizations in Washington:

- Inna Andrews, MD, Multicare Health System
- Robert Benedetti, MD, Rockwood Clinic
- Katherine A. Choi-Chinn, MD, Washington State Radiology Society
- Richard Clarfeld, MD, Overlake Medical Clinics
- Milton Curtis, MD, EvergreenHealth
- Christopher Dale, MD, MPH, Swedish Medical Group
- Connie Davis, MD, Skagit Regional Health
- David C. Dugdale, MD, University of Washington (UW) Medicine
- Scott Foster, MD, MPH, PeaceHealth Medical Group
- Matt Handley, MD, Group Health Cooperative
- Dale Hoekema, MD, Kadlec Health System
- Kent Hu, MD, MPH, The Everett Clinic
- Norris Kamo, MD, MPP, Virginia Mason Medical Center
- Dan Kent, MD, Premera Blue Cross
- Scott Kronlund, MD, Northwest Physicians Network
- Pat Kulpa, MD, MBA, Regence Blue Shield
- Francis Mercado, MD, CHI Franciscan Health
- Scott Ramsey, MD, PhD, Fred Hutchinson Cancer Research Center
- John Robinson, MD, SM, First Choice Health
- Richard Spiegel, MD, Signal Health
- Thomas K. Varghese Jr, MD, MS, Strong for Surgery, UW Medicine
- Teresa Wolber, DNP, Pacific Medical Centers

Project Leads:

- Teresa Litton, Washington Health Alliance, tlitton@wahealthalliance.org
- Jessica Martinson, Washington State Medical Association, Jessica@wsma.org
- Tanya Carroccio, Washington State Hospital Association, tanyac@wsha.org

The Task Force is using a variety of tactics, including providing resources, to make it easier for delivery systems to integrate Choosing Wisely recommendations into their practices. To that end, the Task Force has developed a Choosing Wisely Action Manual that illustrates some best practices for delivery systems. The Task Force is also sharing clinically-based measure specifications to enable health care organizations to measure and improve their performance.

Tools alone are not enough for this important work. Thus, the Task Force launched the Change One Thing initiative, which targets one Choosing Wisely recommendation, “Don’t do imaging for uncomplicated headache,” that participating organizations will focus on implementing in Washington. The hope is that by working together on the same recommendation, members can learn and
advance principles that can be applied to other overuse issues and measurably improve the care in Washington.

Health care in the U.S. is more expensive than in any other nation. One way to reduce health care costs is to identify ways to decrease waste in the health care system. Waste can be difficult to identify, but the Task Force believes that the Choosing Wisely recommendations are an important step towards that goal.

**Results summary**

This report provides the first public look at how the Choosing Wisely recommendations reveal either potentially troubling practice patterns or reflect how recommendations have already become common practice.

Many people assume Choosing Wisely recommendations are best practices already accepted as standard care. If this is true, and provider practice patterns already reflected that standard of care, then low rates and narrow variation would be expected. However, the findings show this is not the case for most of the Choosing Wisely recommendations evaluated in this report.

**Washington state key findings:**

- Variation exists. Often the rates between the lowest and highest performing counties vary by more than twofold.
- Overuse is a common problem.
- Where you live may influence the treatment you get.
- Opportunities to reduce waste exist in every county.
- Patients may be getting unnecessary care that costs money and puts them at risk.
- Regional patterns may be affected by the availability of services and equipment or provider practice patterns.

**Potential targets**

Choosing Wisely recommendations are just that: recommendations. They are not absolutes, but instead are guidelines meant to encourage and guide conversations between patients and physicians. With some exceptions, the goals of the recommendations are not to eliminate the use of a particular treatment or procedure. Therefore, it is important to recognize that under clinical circumstances some patients should receive the treatment or diagnostic test in question.
There are no existing national benchmarks (i.e., targets for desired performance) for the Choosing Wisely recommendations. But it is clear that lower rates of use of the tests or treatments are generally more desirable. Counties that perform well on measures are setting preliminary guideposts for other organizations as Choosing Wisely recommendations are more widely adopted.

Troubling variation
The results demonstrate a surprising amount of variation in the health care provided in Washington state. Where you live and whether you have commercial insurance or Medicaid has a direct impact on the type of care you receive. This raises a concern that not all Washingtonians receive similar care.

- The largest variation between counties is found in the measure looking at follow-up testing for simple adnexal (ovarian) cysts, with a 54 percentage point difference between the highest (67 percent for Asotin) and lowest county (13 percent for Whatcom) rates—resulting in a five-fold difference.
- Commercial enrollees received more appropriate care than Medicaid on six out of 11 measures (Use of spirometry in diagnosing asthma, follow-up imaging for simple adnexal (ovarian) cysts, and imaging for uncomplicated headache, low back pain, syncope (fainting) and appendicitis).
- Medicaid enrollees received more appropriate care than commercial enrollees on four measures (Antibiotics and imaging for sinus infections, Pap tests for women with hysterectomies and Pap tests that occur more frequently than recommended).

Out of the 11 measures the Task Force identified, some results raise concerns and some show widespread acceptance of Choosing Wisely recommendations.

Biggest opportunities for improvement

Imaging for uncomplicated headaches (more on pages 9-11)
- 25 percent of patients statewide are receiving imaging for uncomplicated headaches. This high rate combined with the high variation (28 percentage point difference) among counties means there is still a lot of work to be done to reduce the rate of potentially wasteful imaging.

Antibiotics for sinus infections (more on pages 12-14)
- 37 percent of patients statewide are receiving antibiotics for sinus infections. This high rate combined with the high variation (40 percentage point difference) among counties means our state needs to work harder to reduce the overuse of
antibiotics, which can lead to serious public health issues such as antibiotic-resistant bacteria.

Where Washington is doing well

**CT scans for sinus infections (more on pages 14-16)**
- Our state is making smart choices when it comes to avoiding unnecessary CT scans for sinus infections, with less than one percent of patients statewide receiving one.

**Pap tests for women under 21 years (more on pages 29-31)**
- Only four percent of women under 21 are receiving Pap tests. And with only 10 percentage point variation between the highest and lowest counties statewide, this recommendation appears to already be a part of most providers’ and organizations’ standards of care.
Imaging for uncomplicated headaches

Choosing Wisely recommendation: Don’t do imaging for uncomplicated headache.4

Why it matters

Uncomplicated headaches refer to migraines, sinus, cluster or tension headaches, and can cause stabbing pain, a dull ache and impact vision. Headaches can be diagnosed from a physical and neurological exam by your doctor to rule out any underlying diseases or complications; however, only about 5 percent of headaches are caused by underlying conditions.5 Headaches are typically caused by stress, hunger or fatigue. Headaches are typically treated and managed through oral medications.6

The advancement of imaging tests, such as computed tomography (CT) and magnetic resonance imaging (MRI) scans, have improved the diagnosis and early detection of many diseases. However, the increased use of these procedures has also led to the overuse and misuse of these tests. This is a particular concern when it comes to CT scans. A patient getting a CT scan can receive between 150 and 1,100 times the radiation exposure that he would receive from a conventional x-ray. That equates to approximately one year’s worth of exposure to the radiation a person is exposed to from natural and artificial sources in the environment.7 Moreover, unnecessary imaging creates a financial burden for patients, not just from the actual bill for the imaging, but also from the time away from work.8

A recent study found that one in ten people seeking care for headaches ends up having a CT scan or MRI scan.9 According to the American College of Radiology, imaging tests have not been found to improve the outcomes or change the management for uncomplicated headaches and, therefore, are not recommended.4

Clinical note: There are specific situations in which imaging for an acute headache is necessary and can be lifesaving. For example,

25% of Washington patients with an uncomplicated headache, such as migraine, sinus or tension headaches, had a potentially unnecessary CT scan or MRI test.

4 Choosing Wisely recommendation provided by: American College of Radiology
More about how this was measured can be found on page 42.
5 Harvard Health
6 Medline Plus
7 Scientific American
8 American Cancer Society
9 Journal of American Medical Association
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.

Findings

As seen in table 1, one quarter of all patients (one-third of Medicaid enrollees) with uncomplicated headaches received potentially unnecessary CT scans or MRI imaging tests. Adams County performed the best in the state, with only 13 percent of patients with uncomplicated headache receiving unnecessary testing, while patients in Clark County received the most (41 percent) unnecessary testing.

Table 1. The percentage of patients with an uncomplicated headache who received potentially unnecessary CT scans or MRI imaging tests in Washington, 2011-2012.

<table>
<thead>
<tr>
<th>Imaging for uncomplicated headaches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>WASHINGTON STATE AVERAGE</td>
</tr>
<tr>
<td>BEST PERFORMING COUNTY</td>
</tr>
<tr>
<td>WORST PERFORMING COUNTY</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
<tr>
<td>Medicaid</td>
</tr>
<tr>
<td>All Payer</td>
</tr>
</tbody>
</table>

Figures 1 and 2 reveal differences among counties and between commercial and Medicaid enrollees. A few counties show significant differences between treatment of commercial and Medicaid enrollees. Clark County, for example, has better than average rates for this measure for commercial enrollees, but worse than average rates for Medicaid enrollees. Asotin County in southeastern Washington displays an opposite pattern, with commercial populations receiving imaging for uncomplicated headaches at a higher than average rate compared to their Medicaid population, who receives imaging at a lower than average rate.
Figure 1. The percentage of patients who had an uncomplicated headache and had a potentially unnecessary CT scan or MRI imaging test, compared to the state commercial average of 22%, 2011-2012.*

Figure 2. The percentage of patients who had an uncomplicated headache and had a potentially unnecessary CT scan or MRI imaging test, compared to the state Medicaid average of 30%, 2011-2012.*

*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 41-44.
Antibiotics for sinus infections

**Choosing Wisely recommendation:** Don’t order sinus computed tomography (CT) or indiscriminately prescribe antibiotics for uncomplicated acute rhinosinusitis.\(^{10}\)

**Why it matters**

According to the World Health Organization (WHO), antibiotic resistance continues to grow and is a serious global health threat. In fact, all of the WHO regions show very high rates of resistance. With few new antibiotics developed within the past 30 years, antibiotic resistance has reached alarming levels in many areas of the world.\(^{11}\)

The majority of cases of acute rhinosinusitis (sinus infections) are viral infections and will not respond to antibiotics. With the limited time providers have with each patient, prescribing antibiotics can be a quick and inexpensive gesture of support to suffering patients. However, most sinus infections go away without treatment, according to the American Academy of Allergy, Asthma and Immunology. Less than two percent of sinus infections advance to bacterial infections, which are considered complicated sinus infections where antibiotics are appropriate.\(^{10}\)

**Clinical note:** *In certain situations, like in patients with symptoms for more than 10 days or who have a high fever, antibiotics may be needed.*

**Findings**

Considering how antibiotics do not work for most sinus infections and the growing problem of antibiotic resistance, rates of potentially unnecessary antibiotics use should be very low. However, as seen in table 2, on average 37 percent of patients in Washington are receiving antibiotics for acute sinus infections with some counties’ rates reaching as high as 61 percent.

Analysis also shows there is not only wide variation among counties, but also between Medicaid and commercial enrollee populations. The county with the largest difference, as seen in figures 3 and 4

---

\(^{10}\) Choosing Wisely recommendation provided by: American Academy of Allergy, Asthma & Immunology. More about how this was measured can be found on page 42. 
*NOTE: recommendation is split into two measures= CT and Antibiotics.*

\(^{11}\) WHO Surveillance Report
below, is Yakima County, where providers prescribe antibiotics to 50 percent (worse than the state average) of their commercially insured patients with sinus infections but only 23 percent (better than the state average) of Medicaid patients. King, Adams and Clark counties are the only counties that have better than average rates for both commercial and Medicaid populations. This is in contrast to the 11 counties that maintain worse than average rates for both commercial and Medicaid.

Table 2. The percentage of patients with uncomplicated sinusitis that were prescribed potentially unnecessary antibiotics in Washington state, 2011-2012.

<table>
<thead>
<tr>
<th>Antibiotics for sinus infections</th>
<th>Washington State Average</th>
<th>Best Performing County</th>
<th>Worst Performing County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>43%</td>
<td>36% in Clark and Island</td>
<td>61% in Asotin and Lincoln</td>
</tr>
<tr>
<td>Medicaid</td>
<td>28%</td>
<td>21% in Adams and Skamania</td>
<td>44% in Lincoln</td>
</tr>
</tbody>
</table>

All Payer 37%

Figure 3. The percentage of patients with uncomplicated sinusitis who were prescribed potentially unnecessary antibiotics, compared to the state commercial average of 43%, 2011-2012.

*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 41-44.
CT scans for sinus infections

Choosing Wisely recommendation: Don’t order sinus computed tomography (CT) or indiscriminately prescribe antibiotics for uncomplicated acute rhinosinusitis (sinus infections).

Why it matters

CT scans expose people to the risk of unnecessary radiation exposure and the financial burden of paying higher costs. Whenever CT scans are considered, these risks should be taken into account alongside the benefits. The American Academy of Allergy, Asthma and Immunology does not recommend ordering CT scans for sinus infections as most resolve without treatment within two weeks.

Findings

Less than one percent of Washington patients diagnosed with a sinus infection received a potentially unnecessary CT scan. As seen in table

---

12 Choosing Wisely recommendation provided by: American Academy of Allergy, Asthma and Immunology. More about how this was measured can be found on page 42. NOTE: The recommendation was split into two measures= CT’s and Antibiotics.
3, not only are the results extremely positive, there is also little variation across the state, possibly demonstrating that this clinical guideline has already become a standard of care in Washington state.

Table 3. The percentage of patients with a sinus infection who had a potentially unnecessary CT scan in Washington state, 2011-2012.

<table>
<thead>
<tr>
<th>CT scans for sinus infections</th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>&lt;1% (0.9%)</td>
<td>0.0% in Skamania and Wahkiakum</td>
<td>1.2% in Spokane</td>
</tr>
<tr>
<td>Medicaid</td>
<td>&lt;1% (0.3%)</td>
<td>0.0% in San Juan, Whitman, Garfield, and Columbia</td>
<td>0.5% in Spokane</td>
</tr>
<tr>
<td>All Payer</td>
<td>&lt;1% (0.7%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in figures 5 and 6, most counties are not performing unnecessary CT scans for sinus infections. Even though Spokane is statistically worse than average for both commercial and Medicaid rates, the actual number of patients affected is very low. Spokane is only slightly higher than state averages—within one-third of one percentage point (1.2 percent in commercial and 0.5 percent in Medicaid).

How to understand map color ratings for figures 5 and 6

Both maps portray results from statistical testing which can be confusing. For example, in figure 5, Lincoln and Spokane counties have the same rate (1.2 percent) but are colored differently. This means that Lincoln’s confidence interval range (0.06 to 2.3 percent) includes the state rate of 0.9 percent and therefore is not statistically different; whereas Spokane’s confidence interval (1.0 to 1.3 percent) was completely above the state’s average rate, making the results statistically different. Another example of confidence intervals impacting the statistical color rating can be seen in figure 6 where Lincoln County has a higher rate (0.8 percent) than Spokane’s statistically worse rate (0.5 percent). Confidence intervals are partly impacted by denominator size, with larger denominators often resulting in more narrow confidence intervals. More information on the statistical methodology and how to read the maps can be found on page 43.
Figure 5. The percentage of patients with uncomplicated sinusitis who had a potentially unnecessary CT scan, compared to the state **commercial average of 0.9%**, 2011-2012. *

Figure 6. The percentage of patients with uncomplicated sinusitis who had a potentially unnecessary CT scan, compared to the state **Medicaid average of 0.3%**, 2011-2012. *

*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 41-44.
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.\textsuperscript{13}

Why it matters

Low back pain is one of patients’ most common complaints. Americans spend at least $50 billion each year on low back pain, which is the most common cause of job-related disability and a leading contributor to missed work.\textsuperscript{14}

The good news is that low back pain often goes away on its own within a month. Imaging tests, such as x-rays and CT scans, 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. Moreover, they also are expensive, with x-rays, MRI tests and CT scans costing as much as $290, $1,230 and $1,520, respectively.\textsuperscript{13}

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 your doctor.

Findings

In Washington, 14 percent of patients experiencing uncomplicated low back pain received a potentially unnecessary imaging test. As shown in table 4, San Juan is the best performing county (2 percent) and Lewis County had a high 25 percent rate, making it the worst performing county.

\textbf{Table 4. The percentage of patients with uncomplicated low back pain who received a potentially unnecessary imaging test in Washington state, 2011-2012.}

<table>
<thead>
<tr>
<th>Imaging for uncomplicated low back pain</th>
<th>Washington State Average</th>
<th>Best Performing County</th>
<th>Worst Performing County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>13%</td>
<td>2% in San Juan</td>
<td>17% in Kitsap</td>
</tr>
<tr>
<td>Medicaid</td>
<td>15%</td>
<td>7% in Yakima and Chelan</td>
<td>25% in Lewis</td>
</tr>
<tr>
<td>All Payer</td>
<td>\textbf{14%}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{13} Choosing Wisely recommendation provided by: American Academy of Family Physicians

More about how this was measured can be found on page 42. \textsuperscript{*NOTE: The Choosing Wisely Task Force selected the nationally recognized HEDIS measure which measures at four weeks, instead of six weeks.}

\textsuperscript{14} National Institute of Neurological Disorders and Stroke
As seen in figures 7 and 8, an interesting finding is the variation found within counties between Medicaid and commercial enrollees. For example, Yakima County’s rates range from 7 percent for Medicaid enrollees to 15 percent for commercial enrollees. Another example is Lewis and Grays Harbor counties, where Medicaid enrollees received double (25 and 24 percent) the rate of imaging for uncomplicated back pain that commercially-insured patients (10 and 11 percent) received.

Figure 7. The percentage of patients with uncomplicated low back pain who had a potentially unnecessary imaging test, compared to the state commercial average of 13%, 2011-2012.*

Figure 8. The percentage of patients with uncomplicated low back pain who had a potentially unnecessary imaging test, compared to the state Medicaid average of 15%, 2011-2012.*

*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 41-44.
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).

**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. Fainting can be alarming; however, recovery generally occurs within minutes.

According to the American College of Physicians, the outcomes for patients with simple syncope (fainting) without other symptoms 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 (fainting) is accompanied by a history suggesting a neurologic event.

**Findings**

One-quarter of patients in Washington with a primary diagnosis of fainting without other neurological symptoms had a potentially unnecessary imaging test. Medicaid enrollees received imaging at an even higher rate, with one-third of patients receiving unnecessary tests. As table 5 highlights, Adams and Douglas counties have the best rates for this measure and Clark and Yakima counties are the worst performing counties, with a high rate of 37 percent.

---

15 Choosing Wisely recommendation provided by: American College of Physicians. More about how this was measured can be found on page 42.

16 American Family Physician
Table 5. The percentage of patients with syncope (fainting) who received a potentially unnecessary imaging test in Washington state, 2011-2012.

### Imaging for simple syncope (fainting)

<table>
<thead>
<tr>
<th></th>
<th>Washington State Average</th>
<th>Best Performing County</th>
<th>Worst Performing County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>23%</td>
<td>9% Adams</td>
<td>29% in Pierce</td>
</tr>
<tr>
<td>Medicaid</td>
<td>31%</td>
<td>9% Douglas</td>
<td>37% Clark and Yakima</td>
</tr>
<tr>
<td>All Payer</td>
<td>26%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The statewide rate for Medicaid enrollees is eight percentage points worse than the commercial rate. Many of the counties follow this trend—higher rate of unnecessary imaging for fainting for Medicaid enrollees. As seen in table 6, counties with statistically worse rates for Medicaid enrollees also have noticeably better results among commercial enrollees. In contrast, counties with better than average rates for commercial enrollees also have markedly higher rates for Medicaid enrollees, with up to a twenty percentage point difference in Okanogan County (commercial at 13 percent and Medicaid at 33 percent).

Table 6. Example of selected counties and the higher rates among Medicaid enrollees, when compared to commercial, for patients with syncope (fainting) who received a potentially unnecessary imaging test in Washington state, 2011-2012.

### Imaging for simple syncope (fainting)

<table>
<thead>
<tr>
<th></th>
<th>Commercial</th>
<th>Medicaid</th>
<th>Percentage Point Difference in Medicaid Versus Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pierce</td>
<td>29%</td>
<td>35%</td>
<td>+6</td>
</tr>
<tr>
<td>Yakima</td>
<td>24%</td>
<td>37%</td>
<td>+13</td>
</tr>
<tr>
<td>Clark</td>
<td>23%</td>
<td>37%</td>
<td>+14</td>
</tr>
<tr>
<td>Thurston</td>
<td>19%</td>
<td>26%</td>
<td>+7</td>
</tr>
<tr>
<td>Okanogan</td>
<td>13%</td>
<td>33%</td>
<td>+20</td>
</tr>
<tr>
<td>Walla Walla</td>
<td>13%</td>
<td>23%</td>
<td>+10</td>
</tr>
</tbody>
</table>
Figure 9. The percentage of patients with simple syncope (fainting) who had a potentially unnecessary imaging test, compared to the commercial average of 23%, 2011-2012. *

Figure 10. The percentage of patients with simple syncope (fainting) who had a potentially unnecessary imaging test, compared to the Medicaid average of 31%, 2011-2012. *

*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 41-44.
CT scans for appendicitis

Choosing Wisely recommendation: Don’t do CT for evaluation of suspected appendicitis in children until after ultrasound has been considered.¹⁷

Why it matters

Appendicitis is an inflammation of the appendix, which is located on the colon in the lower right abdomen. The appendix can become infected and in 30 percent of cases can rupture, releasing the infection into the abdominal cavity. In the United States, appendicitis affects approximately 80,000 children every year and is the leading cause for emergency abdominal surgery for children.¹⁸

Reducing radiation exposure in children is especially important because children have a greater risk of cancer from radiation exposure than adults. Children are particularly vulnerable as their bodies are still developing and they have a lifetime ahead of them where they will be exposed to additional risks.¹⁹

According to the American College of Radiology, ultrasound is the recommended initial test to diagnose appendicitis, with an accuracy of 94 percent. CT scans should only be considered after an ultrasound has been performed and more information is needed. This process 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 scans.¹⁷,²⁰

Clinical note: Follow-up CT scans may be necessary if the results from an ultrasound are unclear and additional information is needed.

Findings

In Washington, a third of children with appendicitis are being unnecessarily exposed to radiation through CT scans when ultrasounds are a safer and more effective alternative. The variation is high across the state on this measure, with a 41 percentage point

³⁰% of Washington children with appendicitis had a potentially unnecessary CT scan.

¹⁷ Choosing Wisely recommendation provided by: American College of Radiology. More about how this was measured can be found on page 42.
¹⁸ Cleveland Clinic
¹⁹ American Cancer Society
²⁰ Healthcare Bluebook
difference between the best performing county (Clark, 14 percent) and the worst performing county (Yakima, 55 percent).

As seen in figures 11 and 12, most counties are in grey indicating that there are not enough reportable cases, which is not uncommon when looking at a specific age range. This measure only included children less than 18 years old.

Table 7. The percentage of children with appendicitis who received a potentially unnecessary CT scan in Washington state, 2011-2012.

<table>
<thead>
<tr>
<th>CT scans for appendicitis</th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>30%</td>
<td>17% in Pierce</td>
<td>*</td>
</tr>
<tr>
<td>Medicaid</td>
<td>31%</td>
<td>14% in Clark</td>
<td>55% in Yakima</td>
</tr>
<tr>
<td>All Payer</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Figure 11. The percentage of children with appendicitis who received a potentially unnecessary CT scan, compared to the commercial average of 30%, 2011-2012.*

*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 41-44.
Too frequent Pap tests

Choosing Wisely recommendation: Don’t perform routine annual cervical cytology screening (Pap tests) in women 30–65 years of age.²¹

Why it matters

Pap smear tests screen for cervical cancer. Pap smears were introduced in the 1940s at a time when cervical cancer was the deadliest cancer among women. For many years, the standard was to have annual pap tests; however, cervical cancer is now relatively rare, with about 4,000 deaths in the United States each year.²²,²³ In 2012, new cervical cancer screening guidelines were released, with Pap tests recommended every three years for women.²⁴

²¹ Choosing Wisely recommendation provided by: American College of Obstetricians and Gynecologists. More about how this was measured can be found on page 42.
²² American Cancer Society
²³ Centers for Disease Control and Prevention
²⁴ US Preventive Services Task Force

57% of Washington female patients are receiving too many Pap tests.
Clinical note: For patients with a previous abnormal Pap test result or a history of cancer, annual Pap tests are often recommended.

Findings

The new cervical cancer screening recommendations were released in 2012, which is the same measurement year used in this report. For this reason, results from this report can serve as a baseline rate for this recommendation. We will be watching to see how Washington progresses in adopting this recommendation, especially since it replaces a longstanding, common practice followed by both providers and patients.

Table 8. The percentage of female patients who received too frequent Pap tests in Washington state, 2011-2012.

<table>
<thead>
<tr>
<th>Female patients with too frequent Pap tests</th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>59%</td>
<td>47% in Ferry</td>
<td>68% in Douglas, Kittitas and Walla Walla</td>
</tr>
<tr>
<td>Medicaid</td>
<td>44%</td>
<td>27% in Clark</td>
<td>67% in Lincoln</td>
</tr>
<tr>
<td>All Payer</td>
<td>57%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With that said, over half of the women in Washington are getting too frequent, potentially unnecessary Pap tests, clearly leaving room for improvement. As seen in table 8, the variation is also high with a 40 percentage point difference between the best performing county (27 percent, Clark) and the worst performing counties (68 percent, Douglas, Kittitas and Walla Walla).
Figure 13. The percentage of female patients who had too frequent Pap tests, compared by the commercial average of 59%, 2011-2012. *

Figure 14. The percentage of female patients who had too frequent Pap tests, compared to the Medicaid average of 44%, 2011-2012. *

*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 41-44.
Pap tests for patients with a previous hysterectomy

Choosing Wisely recommendation: Don’t perform Pap smears on women younger than 21 or who had hysterectomy for non-cancer disease.25

Why it matters

Hysterectomies are surgeries that remove the uterus (a partial hysterectomy) and often times the fallopian tubes, ovaries and cervix are also removed (a total hysterectomy).26 Pap smear tests screen for cervical cancer, or cancer of the cervix, and have not been found beneficial in women with a non-cancer related hysterectomy.25

Clinical note: Pap tests are recommended for patients with a hysterectomy who have a history of cervical cancer.

Findings

In Washington, 17 percent of women with a previous hysterectomy are receiving a potentially unnecessary Pap smear test. The variation is high, with a 31 percentage point difference between the worst performing county (Pacific, 31 percent) and the best performing county (Douglas, 0 percent). Interestingly, Douglas County is the best performer for both commercial (6 percent) and Medicaid (0 percent) enrollees.

Table 9. The percentage of female patients who have previously had a hysterectomy and received a potentially unnecessary Pap test in Washington, 2011-2012.

<table>
<thead>
<tr>
<th></th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>18%</td>
<td>6% in Douglas</td>
<td>31% in Pacific</td>
</tr>
<tr>
<td>Medicaid</td>
<td>14%</td>
<td>0% in Douglas</td>
<td>25% in Cowlitz</td>
</tr>
<tr>
<td>All Payer</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in figures 15 and 16, Medicaid (14 percent) has a slightly lower rate than commercial (18 percent) enrollees. There are a few

25 Choosing Wisely recommendation provided by: American Academy of Family Physicians. More about how this was measured can be found on page 42.

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

26 American College of Obstetricians and Gynecologists.
counties that have high variation among payers, such as Kitsap and Clark counties. Kitsap County has an eight percentage point difference between payers, with the commercial enrollee rate (13 percent) better than average and the Medicaid enrollee rate (21 percent) worse than average. By contrast, Clark County has a 21 percentage point difference between payers, with the commercial enrollee rate (29 percent) worse than average and the Medicaid enrollee rate (eight percent) better than average.

*Figure 15. The percentage of female patients with a previous hysterectomy who had a potentially unnecessary Pap tests, compared to the commercial average of 18%, 2011-2012.*

*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 41-44.*
Figure 16. The percentage of female patients with a previous hysterectomy who had a potentially unnecessary Pap tests, compared to the Medicaid average of 14%, 2011-2012.*

*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 41-44.

Pap tests for young women under 21 years old

**Choosing Wisely recommendation:** Don’t perform Pap smears on women younger than 21 or who had hysterectomy for non-cancer disease.  

**Why it matters**

Pap smear tests have been found to do more harm than good for young women less than 21 years of age. When abnormalities are found in Pap smear tests, it is typically followed with more testing and invasive procedures causing psychological and physical harm, such as stress, anxiety, vaginal bleeding and infections. However, for healthy young women, the chances of getting cervical cancer is low, making the risk from screening outweigh the benefits.

4% of Washington female patients under the age of 21 received a potentially unnecessary Pap test.

---

27 Choosing Wisely recommendation provided by: American Academy of Family Physicians. More about how this was measured can be found on page 42.

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

28 US Preventive Services Task Force
Clinical note: For patients under 21 years of age who have a history of cancer or certain symptoms, a Pap test may be needed.

Findings

Washington does well on this Choosing Wisely recommendation, with a low 4 percent all-payer rate. However, there is a 10 percentage point variation found between the best performing counties (Klickitat and Clark, 1 percent) and the worst performing counties (Lincoln and Columbia, 11 percent).

Table 10. The percentage of young female patients under the age of 21 who received a potentially unnecessary Pap test in Washington state, 2011-2012.

<table>
<thead>
<tr>
<th></th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>4%</td>
<td>1% in Klickitat</td>
<td>11% in Lincoln</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4%</td>
<td>1% in Clark</td>
<td>11% in Columbia</td>
</tr>
<tr>
<td>All Payer</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is one of the few measures where all of the counties have similar rates among payers. The highest variation found within counties is a five percentage point difference between commercial and Medicaid enrollee rates in Ferry (9 and 4 percent), Lincoln (11 and 7 percent) and Columbia (6 and 11 percent) counties.

Figure 17. The percentage of young female patients under the age of 21 who had a potentially unnecessary Pap test, compared to the commercial average of 4%, 2011-2012. *

*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 41-44.
Follow-up imaging for adnexal (ovarian) cysts

**Choosing Wisely recommendation:** Don’t recommend follow-up imaging for clinically inconsequential adnexal cysts.29

**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. Adnexal cysts are referred to as “simple” adnexal cysts when they only contain fluid and are sometimes found during routine pelvic exams.

When an adnexal cyst is found, it is commonly evaluated with a vaginal ultrasound imaging test to see if it is cancerous. However, follow-up imaging tests do not provide any additional information to the doctor for inconsequential cysts, or non-cancerous cysts smaller

---

29 Choosing Wisely recommendation provided by: American College of Radiology.

More about how this was measured can be found on page 42.
than five centimeters. Furthermore, the extra tests can cause women unnecessary anxiety and stress, as well as the cost of avoidable follow-up tests.\textsuperscript{30}

\textbf{Clinical note: In cases where the initial test revealed worrisome results about the size or features of the cyst, a follow-up imaging test may be needed.}

\textbf{Findings}

As seen in table 11, there is room for improvement with 39 percent of all payers with adnexal cysts receiving unnecessary follow-up imaging tests. On this recommendation, the variation seen across the state is troubling, with a 54 percentage point difference between the best performing county (Whatcom, 13 percent) and the worst performing county (Asotin, 67 percent).

\textit{Table 11. The percentage of patients with a simple adnexal cyst who had a potentially unnecessary follow-up imaging test in Washington state, 2011-2012.}

<table>
<thead>
<tr>
<th>Patients with simple adnexal cysts who had unnecessary imaging</th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>37%</td>
<td>13% in Whatcom</td>
<td>61% in Island</td>
</tr>
<tr>
<td>Medicaid</td>
<td>41%</td>
<td>19% in Yakima</td>
<td>67% in Asotin</td>
</tr>
<tr>
<td>All Payer</td>
<td>39%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As seen in figures 19 and 20, not only are the state commercial (37 percent) and Medicaid (41 percent) average rates high overall, but there are also a high number of counties where over half of the patients with adnexal cysts are receiving unnecessary follow-up tests. Two counties (Clallam and Asotin) have rates above 60 percent for their Medicaid population.

\textsuperscript{30} Choosing Wisely
Figure 19. The percentage of patients with a simple adnexal cyst who had a potentially unnecessary follow-up imaging test, compared to the **commercial average of 37%**, 2011-2012.*

*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 41-44.

Figure 20. The percentage of patients with a simple adnexal cysts who had a potentially unnecessary follow-up imaging test, compared to the **Medicaid average of 41%**, 2011-2012.*

*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 41-44.
Spirometry testing for asthma

Choosing Wisely recommendation: Don’t diagnose or manage asthma without spirometry.\(^{31}\)

Why it matters

Asthma is the irritation of the airways or tubes that carry air into and out of the lungs. Symptoms may include cough, wheezing and chest tightness. Washington state has one of the highest rates of asthma in the country, with almost one in ten Washingtonians suffering from asthma.\(^{32}\) Medication can help control asthma and avoid serious breathing troubles, fatigue, visits to the hospital and even death. Asthma can be successfully managed through use of long-term controller medications.

Unlike the previous Choosing Wisely recommendations, this measure looks at the underuse of effective care—using spirometry tests to diagnose and manage asthma. Spirometry, a lung function test, is not only good at diagnosing asthma, but also important for effectively managing asthma. Spirometry tests are able to better pinpoint the type and complexity of each patient’s asthma condition, therefore better informing the provider of the best treatment options and, ultimately, providing optimal care for the patient.\(^{31}\)

Findings

There is clearly room for improvement in Washington, with 74 percent of asthma patients 11 years and older not receiving the recommended spirometry test. Even more, the worst performing county, Klickitat, has a rate of 90 percent, meaning that only one out of ten patients is being diagnosed with a spirometry test. Whatcom County’s rate is 64 percent, which makes it the best performing county in the state. This finding shows that the use of spirometry tests is not a common practice across Washington state.

---

\(^{31}\) Choosing Wisely recommendation provided by: American Academy of Allergy, Asthma & Immunology. More about how this was measured can be found on page 42.

\(^{32}\) Washington State Department of Health
Table 12. The percentage of patients 11 years and older who did not have a spirometry test within three years of being diagnosed with asthma, 2011-2012.

**Spirometry to diagnose asthma**

<table>
<thead>
<tr>
<th></th>
<th>WASHINGTON STATE AVERAGE</th>
<th>BEST PERFORMING COUNTY</th>
<th>WORST PERFORMING COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial</td>
<td>72%</td>
<td>64% in Whatcom</td>
<td>86% in Chelan</td>
</tr>
<tr>
<td>Medicaid</td>
<td>78%</td>
<td>73% in Benton</td>
<td>90% Klickitat</td>
</tr>
<tr>
<td><strong>All Payer</strong></td>
<td><strong>74%</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In figures 21 and 22, commercial enrollees are receiving slightly better care with the recommended spirometry testing than Medicaid enrollees (72 and 88 percent, respectively). Benton County has better than average results for both commercial (65 percent) and Medicaid (73 percent) while being surrounded by several counties that are worse than average.

*Figure 21. The percentage of patients 11 years and older who did not have a spirometry test within three years of being diagnosed with asthma, compared to the commercial average of 72%, 2011-2012.*

*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 41-44.*
Figure 22. The percentage of patients 11 years and older who did not have a spirometry test within three years of being diagnosed with asthma, compared to the Medicaid average of 78%, 2011-2012.

*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 41-44.
Ranked and summary county-level results

The following tables provide a view of each county’s performance on the 11 Choosing Wisely measures in both ranked and summary formats.

**Figure 23. Washington state county’s ranked by performance based on the number of results found significantly better (green) or worse (red) than the state average on 11 Choosing Wisely measures for commercial enrollees, 2011-2012.**

**County-level ranked results for commercial population**

* More information on the measures, data and statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 41-44.
Figure 24. Washington state county’s ranked by performance based on the number of results found significantly better (green) or worse (red) than the state average on the 11 Choosing Wisely measures for Medicaid enrollees, 2011-2012.*

County-level ranked results for Medicaid population

* More information on the measures, data and statistical analysis used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 41-44.
## Figure 25. Washington state results for the 11 Choosing Wisely measures by county, 2011-2012.**

### County-level results for commercial population

<table>
<thead>
<tr>
<th>State</th>
<th>Diagnosing asthma without spirometry</th>
<th>Imaging for appendicitis</th>
<th>Imaging for low back pain</th>
<th>Imaging for uncomplicated headache</th>
<th>Antibiotics for sinus infections</th>
<th>Imaging for sinus infections</th>
<th>Pap smears, women with hysterectomy</th>
<th>Pap smears, women younger than 21</th>
<th>Annual pap tests</th>
<th>Imaging for adnexal cysts</th>
<th>Imaging for simple syncope (fainting)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State average</strong></td>
<td>72%</td>
<td>30%</td>
<td>13%</td>
<td>22%</td>
<td>43%</td>
<td>0.9%</td>
<td>18%</td>
<td>4%</td>
<td>59%</td>
<td>37%</td>
<td>23%</td>
</tr>
<tr>
<td>Adams</td>
<td>76%</td>
<td>*</td>
<td>10%</td>
<td>18%</td>
<td>37%</td>
<td>0.6%</td>
<td>17%</td>
<td>3%</td>
<td>59%</td>
<td>*</td>
<td>9%</td>
</tr>
<tr>
<td>Asotin</td>
<td>78%</td>
<td>*</td>
<td>5%</td>
<td>34%</td>
<td>61%</td>
<td>0.4%</td>
<td>*</td>
<td>7%</td>
<td>65%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Benton</td>
<td>65%</td>
<td>*</td>
<td>10%</td>
<td>27%</td>
<td>46%</td>
<td>0.8%</td>
<td>20%</td>
<td>4%</td>
<td>62%</td>
<td>56%</td>
<td>22%</td>
</tr>
<tr>
<td>Chelan</td>
<td>86%</td>
<td>*</td>
<td>10%</td>
<td>16%</td>
<td>44%</td>
<td>1.4%</td>
<td>13%</td>
<td>4%</td>
<td>67%</td>
<td>30%</td>
<td>22%</td>
</tr>
<tr>
<td>Clallam</td>
<td>78%</td>
<td>*</td>
<td>13%</td>
<td>22%</td>
<td>42%</td>
<td>0.7%</td>
<td>14%</td>
<td>3%</td>
<td>57%</td>
<td>57%</td>
<td>29%</td>
</tr>
<tr>
<td>Clark</td>
<td>69%</td>
<td>*</td>
<td>12%</td>
<td>19%</td>
<td>36%</td>
<td>0.8%</td>
<td>29%</td>
<td>2%</td>
<td>59%</td>
<td>36%</td>
<td>23%</td>
</tr>
<tr>
<td>Columbia</td>
<td>85%</td>
<td>*</td>
<td>15%</td>
<td>53%</td>
<td>3.8%</td>
<td>*</td>
<td>6%</td>
<td>62%</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Cowlitz</td>
<td>74%</td>
<td>*</td>
<td>13%</td>
<td>20%</td>
<td>52%</td>
<td>0.8%</td>
<td>22%</td>
<td>4%</td>
<td>62%</td>
<td>53%</td>
<td>20%</td>
</tr>
<tr>
<td>Douglas</td>
<td>85%</td>
<td>*</td>
<td>14%</td>
<td>17%</td>
<td>39%</td>
<td>1.2%</td>
<td>6%</td>
<td>5%</td>
<td>68%</td>
<td>*</td>
<td>18%</td>
</tr>
<tr>
<td>Ferry</td>
<td>73%</td>
<td>*</td>
<td>21%</td>
<td>45%</td>
<td>2.7%</td>
<td>*</td>
<td>9%</td>
<td>47%</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Franklin</td>
<td>71%</td>
<td>*</td>
<td>13%</td>
<td>30%</td>
<td>42%</td>
<td>0.7%</td>
<td>26%</td>
<td>3%</td>
<td>61%</td>
<td>45%</td>
<td>20%</td>
</tr>
<tr>
<td>Garfield</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>58%</td>
<td>2.6%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>53%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Grant</td>
<td>78%</td>
<td>*</td>
<td>10%</td>
<td>21%</td>
<td>45%</td>
<td>0.7%</td>
<td>21%</td>
<td>3%</td>
<td>60%</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>Grays Harbor</td>
<td>80%</td>
<td>*</td>
<td>11%</td>
<td>25%</td>
<td>53%</td>
<td>0.6%</td>
<td>21%</td>
<td>6%</td>
<td>65%</td>
<td>43%</td>
<td>24%</td>
</tr>
<tr>
<td>Island</td>
<td>66%</td>
<td>*</td>
<td>8%</td>
<td>22%</td>
<td>36%</td>
<td>1.4%</td>
<td>15%</td>
<td>3%</td>
<td>54%</td>
<td>61%</td>
<td>27%</td>
</tr>
<tr>
<td>Jefferson</td>
<td>71%</td>
<td>*</td>
<td>17%</td>
<td>29%</td>
<td>47%</td>
<td>2.0%</td>
<td>14%</td>
<td>8%</td>
<td>50%</td>
<td>50%</td>
<td>21%</td>
</tr>
<tr>
<td>King</td>
<td>71%</td>
<td>23%</td>
<td>13%</td>
<td>20%</td>
<td>40%</td>
<td>0.9%</td>
<td>17%</td>
<td>3%</td>
<td>57%</td>
<td>44%</td>
<td>21%</td>
</tr>
<tr>
<td>Kitsap</td>
<td>73%</td>
<td>*</td>
<td>17%</td>
<td>24%</td>
<td>41%</td>
<td>0.7%</td>
<td>13%</td>
<td>4%</td>
<td>55%</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>Kittitas</td>
<td>70%</td>
<td>*</td>
<td>9%</td>
<td>28%</td>
<td>41%</td>
<td>0.9%</td>
<td>15%</td>
<td>2%</td>
<td>68%</td>
<td>18%</td>
<td>24%</td>
</tr>
<tr>
<td>Klickitat</td>
<td>76%</td>
<td>*</td>
<td>9%</td>
<td>25%</td>
<td>45%</td>
<td>0.6%</td>
<td>19%</td>
<td>1%</td>
<td>51%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Lewis</td>
<td>76%</td>
<td>*</td>
<td>10%</td>
<td>27%</td>
<td>49%</td>
<td>0.8%</td>
<td>24%</td>
<td>3%</td>
<td>57%</td>
<td>51%</td>
<td>21%</td>
</tr>
<tr>
<td>Lincoln</td>
<td>84%</td>
<td>*</td>
<td>9%</td>
<td>25%</td>
<td>61%</td>
<td>1.2%</td>
<td>20%</td>
<td>11%</td>
<td>65%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Mason</td>
<td>72%</td>
<td>*</td>
<td>16%</td>
<td>26%</td>
<td>40%</td>
<td>1.1%</td>
<td>13%</td>
<td>4%</td>
<td>55%</td>
<td>28%</td>
<td>21%</td>
</tr>
<tr>
<td>Okanogan</td>
<td>80%</td>
<td>*</td>
<td>10%</td>
<td>15%</td>
<td>46%</td>
<td>0.9%</td>
<td>15%</td>
<td>5%</td>
<td>54%</td>
<td>*</td>
<td>13%</td>
</tr>
<tr>
<td>Pacific</td>
<td>72%</td>
<td>*</td>
<td>9%</td>
<td>25%</td>
<td>60%</td>
<td>1.4%</td>
<td>31%</td>
<td>7%</td>
<td>64%</td>
<td>*</td>
<td>27%</td>
</tr>
<tr>
<td>Pend Oreille</td>
<td>62%</td>
<td>*</td>
<td>35%</td>
<td>43%</td>
<td>0.6%</td>
<td>*</td>
<td>2%</td>
<td>56%</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Pierce</td>
<td>70%</td>
<td>17%</td>
<td>15%</td>
<td>25%</td>
<td>44%</td>
<td>0.8%</td>
<td>20%</td>
<td>5%</td>
<td>60%</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>San Juan</td>
<td>80%</td>
<td>*</td>
<td>2%</td>
<td>15%</td>
<td>42%</td>
<td>0.8%</td>
<td>20%</td>
<td>4%</td>
<td>66%</td>
<td>*</td>
<td>16%</td>
</tr>
<tr>
<td>Skagit</td>
<td>70%</td>
<td>*</td>
<td>12%</td>
<td>23%</td>
<td>50%</td>
<td>0.8%</td>
<td>13%</td>
<td>5%</td>
<td>61%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Skamania</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>39%</td>
<td>0.0%</td>
<td>*</td>
<td>6%</td>
<td>64%</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Snohomish</td>
<td>70%</td>
<td>29%</td>
<td>12%</td>
<td>22%</td>
<td>43%</td>
<td>0.8%</td>
<td>14%</td>
<td>3%</td>
<td>55%</td>
<td>39%</td>
<td>24%</td>
</tr>
<tr>
<td>Spokane</td>
<td>78%</td>
<td>16%</td>
<td>16%</td>
<td>25%</td>
<td>47%</td>
<td>1.2%</td>
<td>23%</td>
<td>5%</td>
<td>64%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>Stevens</td>
<td>73%</td>
<td>*</td>
<td>15%</td>
<td>24%</td>
<td>54%</td>
<td>0.7%</td>
<td>24%</td>
<td>3%</td>
<td>58%</td>
<td>45%</td>
<td>25%</td>
</tr>
<tr>
<td>Thurston</td>
<td>70%</td>
<td>*</td>
<td>13%</td>
<td>20%</td>
<td>44%</td>
<td>1.1%</td>
<td>15%</td>
<td>4%</td>
<td>56%</td>
<td>28%</td>
<td>19%</td>
</tr>
<tr>
<td>Wahkiakum</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>58%</td>
<td>0.0%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>57%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Walla Walla</td>
<td>78%</td>
<td>*</td>
<td>13%</td>
<td>21%</td>
<td>48%</td>
<td>0.4%</td>
<td>13%</td>
<td>4%</td>
<td>68%</td>
<td>41%</td>
<td>13%</td>
</tr>
<tr>
<td>Whatcom</td>
<td>64%</td>
<td>*</td>
<td>11%</td>
<td>25%</td>
<td>45%</td>
<td>0.8%</td>
<td>17%</td>
<td>3%</td>
<td>64%</td>
<td>13%</td>
<td>20%</td>
</tr>
<tr>
<td>Whitman</td>
<td>79%</td>
<td>*</td>
<td>11%</td>
<td>21%</td>
<td>46%</td>
<td>1.0%</td>
<td>20%</td>
<td>3%</td>
<td>56%</td>
<td>54%</td>
<td>18%</td>
</tr>
<tr>
<td>Yakima</td>
<td>73%</td>
<td>*</td>
<td>15%</td>
<td>27%</td>
<td>50%</td>
<td>0.9%</td>
<td>19%</td>
<td>4%</td>
<td>64%</td>
<td>22%</td>
<td>24%</td>
</tr>
</tbody>
</table>

*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 used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 41-44.
### County-level results for Medicaid population

<table>
<thead>
<tr>
<th>State average</th>
<th>Diagnosing asthma without spirometry</th>
<th>Imaging for appendicitis</th>
<th>Imaging for low back pain</th>
<th>Imaging for uncomplicated headache</th>
<th>Antibiotics for sinus infections</th>
<th>Imaging for sinus infections</th>
<th>Pap smears on women who had hysterectomy</th>
<th>Pap smears younger than 21</th>
<th>Annual pap tests</th>
<th>Pap tests</th>
<th>Imaging for adnexal cysts</th>
<th>Imaging for simple syncope</th>
</tr>
</thead>
<tbody>
<tr>
<td>78%</td>
<td>31%</td>
<td>15%</td>
<td>30%</td>
<td>28%</td>
<td>0.3%</td>
<td>14%</td>
<td>4%</td>
<td>44%</td>
<td>41%</td>
<td>31%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams</td>
<td>85%</td>
<td>*</td>
<td>13%</td>
<td>21%</td>
<td>0.2%</td>
<td>*</td>
<td>6%</td>
<td>40%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asotin</td>
<td>80%</td>
<td>*</td>
<td>16%</td>
<td>20%</td>
<td>37%</td>
<td>0.6%</td>
<td>21%</td>
<td>6%</td>
<td>42%</td>
<td>67%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Benton</td>
<td>73%</td>
<td>27%</td>
<td>18%</td>
<td>30%</td>
<td>34%</td>
<td>0.3%</td>
<td>18%</td>
<td>5%</td>
<td>44%</td>
<td>52%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Chelan</td>
<td>80%</td>
<td>*</td>
<td>7%</td>
<td>17%</td>
<td>24%</td>
<td>0.5%</td>
<td>8%</td>
<td>2%</td>
<td>44%</td>
<td>29%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Clallam</td>
<td>82%</td>
<td>*</td>
<td>18%</td>
<td>22%</td>
<td>23%</td>
<td>0.3%</td>
<td>9%</td>
<td>4%</td>
<td>49%</td>
<td>64%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Clark</td>
<td>75%</td>
<td>*</td>
<td>14%</td>
<td>11%</td>
<td>41%</td>
<td>0.5%</td>
<td>8%</td>
<td>1%</td>
<td>27%</td>
<td>46%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Columbia</td>
<td>75%</td>
<td>*</td>
<td>20%</td>
<td>28%</td>
<td>0.0%</td>
<td>11%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Cowlitz</td>
<td>74%</td>
<td>*</td>
<td>14%</td>
<td>34%</td>
<td>31%</td>
<td>0.7%</td>
<td>25%</td>
<td>5%</td>
<td>42%</td>
<td>45%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Douglas</td>
<td>83%</td>
<td>*</td>
<td>13%</td>
<td>13%</td>
<td>28%</td>
<td>0.6%</td>
<td>0%</td>
<td>4%</td>
<td>50%</td>
<td>*</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Ferry</td>
<td>80%</td>
<td>*</td>
<td>20%</td>
<td>38%</td>
<td>0.5%</td>
<td>4%</td>
<td>53%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Franklin</td>
<td>75%</td>
<td>*</td>
<td>42%</td>
<td>17%</td>
<td>24%</td>
<td>0.3%</td>
<td>21%</td>
<td>4%</td>
<td>39%</td>
<td>49%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Garfield</td>
<td>75%</td>
<td>*</td>
<td>*</td>
<td>31%</td>
<td>0.0%</td>
<td>2%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grant</td>
<td>84%</td>
<td>*</td>
<td>29%</td>
<td>18%</td>
<td>17%</td>
<td>0.4%</td>
<td>13%</td>
<td>5%</td>
<td>42%</td>
<td>30%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Grays Harbor</td>
<td>77%</td>
<td>*</td>
<td>24%</td>
<td>34%</td>
<td>37%</td>
<td>0.1%</td>
<td>16%</td>
<td>4%</td>
<td>42%</td>
<td>34%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Island</td>
<td>85%</td>
<td>*</td>
<td>*</td>
<td>32%</td>
<td>30%</td>
<td>0.6%</td>
<td>*</td>
<td>2%</td>
<td>44%</td>
<td>*</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Jefferson</td>
<td>79%</td>
<td>*</td>
<td>27%</td>
<td>27%</td>
<td>23%</td>
<td>0.6%</td>
<td>7%</td>
<td>47%</td>
<td>*</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King</td>
<td>78%</td>
<td>*</td>
<td>27%</td>
<td>14%</td>
<td>31%</td>
<td>0.3%</td>
<td>14%</td>
<td>3%</td>
<td>43%</td>
<td>50%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Kitsap</td>
<td>78%</td>
<td>*</td>
<td>16%</td>
<td>32%</td>
<td>28%</td>
<td>0.3%</td>
<td>21%</td>
<td>6%</td>
<td>47%</td>
<td>27%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Kittitas</td>
<td>75%</td>
<td>*</td>
<td>18%</td>
<td>32%</td>
<td>26%</td>
<td>0.2%</td>
<td>16%</td>
<td>5%</td>
<td>47%</td>
<td>*</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>Klickitat</td>
<td>90%</td>
<td>*</td>
<td>21%</td>
<td>25%</td>
<td>0.6%</td>
<td>*</td>
<td>2%</td>
<td>36%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lewis</td>
<td>75%</td>
<td>*</td>
<td>25%</td>
<td>27%</td>
<td>34%</td>
<td>0.3%</td>
<td>19%</td>
<td>2%</td>
<td>48%</td>
<td>55%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Lincoln</td>
<td>81%</td>
<td>*</td>
<td>24%</td>
<td>44%</td>
<td>0.8%</td>
<td>*</td>
<td>7%</td>
<td>67%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mason</td>
<td>83%</td>
<td>*</td>
<td>12%</td>
<td>28%</td>
<td>29%</td>
<td>0.6%</td>
<td>17%</td>
<td>5%</td>
<td>40%</td>
<td>*</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>Okanogan</td>
<td>81%</td>
<td>*</td>
<td>16%</td>
<td>17%</td>
<td>30%</td>
<td>0.4%</td>
<td>16%</td>
<td>7%</td>
<td>44%</td>
<td>30%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Pacific</td>
<td>85%</td>
<td>*</td>
<td>36%</td>
<td>35%</td>
<td>0.3%</td>
<td>*</td>
<td>4%</td>
<td>49%</td>
<td>*</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pend Oreille</td>
<td>78%</td>
<td>*</td>
<td>26%</td>
<td>29%</td>
<td>0.4%</td>
<td>*</td>
<td>3%</td>
<td>45%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pierce</td>
<td>75%</td>
<td>*</td>
<td>27%</td>
<td>16%</td>
<td>35%</td>
<td>0.2%</td>
<td>15%</td>
<td>5%</td>
<td>46%</td>
<td>35%</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>San Juan</td>
<td>78%</td>
<td>*</td>
<td>26%</td>
<td>24%</td>
<td>0.0%</td>
<td>*</td>
<td>3%</td>
<td>28%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skagit</td>
<td>78%</td>
<td>*</td>
<td>17%</td>
<td>28%</td>
<td>31%</td>
<td>0.3%</td>
<td>11%</td>
<td>4%</td>
<td>36%</td>
<td>41%</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Skamania</td>
<td>79%</td>
<td>*</td>
<td>22%</td>
<td>21%</td>
<td>0.5%</td>
<td>*</td>
<td>5%</td>
<td>46%</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snohomish</td>
<td>78%</td>
<td>*</td>
<td>22%</td>
<td>15%</td>
<td>32%</td>
<td>0.3%</td>
<td>10%</td>
<td>3%</td>
<td>41%</td>
<td>44%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Spokane</td>
<td>78%</td>
<td>18%</td>
<td>17%</td>
<td>29%</td>
<td>34%</td>
<td>0.5%</td>
<td>15%</td>
<td>6%</td>
<td>52%</td>
<td>35%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Stevens</td>
<td>78%</td>
<td>*</td>
<td>16%</td>
<td>32%</td>
<td>35%</td>
<td>0.5%</td>
<td>11%</td>
<td>3%</td>
<td>45%</td>
<td>35%</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Thurston</td>
<td>80%</td>
<td>*</td>
<td>18%</td>
<td>28%</td>
<td>27%</td>
<td>0.3%</td>
<td>13%</td>
<td>4%</td>
<td>47%</td>
<td>38%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Wahkiakum</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>4%</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walla Walla</td>
<td>83%</td>
<td>*</td>
<td>17%</td>
<td>22%</td>
<td>27%</td>
<td>0.2%</td>
<td>10%</td>
<td>6%</td>
<td>53%</td>
<td>44%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Whatcom</td>
<td>74%</td>
<td>*</td>
<td>13%</td>
<td>30%</td>
<td>31%</td>
<td>0.4%</td>
<td>11%</td>
<td>3%</td>
<td>50%</td>
<td>24%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Whitman</td>
<td>77%</td>
<td>*</td>
<td>12%</td>
<td>26%</td>
<td>28%</td>
<td>0.0%</td>
<td>*</td>
<td>7%</td>
<td>45%</td>
<td>*</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Yakima</td>
<td>83%</td>
<td>*</td>
<td>55%</td>
<td>7%</td>
<td>30%</td>
<td>0.2%</td>
<td>10%</td>
<td>3%</td>
<td>42%</td>
<td>19%</td>
<td>37%</td>
<td></td>
</tr>
</tbody>
</table>

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 used to distinguish counties better or worse than average can be found in the Interpreting Results section on pages 41-44.
Interpreting the results

About the measures

There currently are no nationally vetted 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, 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 two recommendations (sinus infections and Pap smears) into two measures each: Imaging and antibiotics for sinus infections and Pap smears for women with a hysterectomy and under 21 years of age). Furthermore, after detailed discussions, the Choosing Wisely Task Force decided to align the timeframe (six weeks versus four weeks) in the Low back pain measure to the National Committee for Quality Assurance’s Healthcare Effectiveness Data and Information Set (HEDIS) metric. These measure specifications were publicly released in early 2014.33

The Alliance then took the technical specifications finalized by the Task Force and applied them to its database of 3.3 million lives in Washington state to produce the county-level, statewide results included in this report.34

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 clinic or provider-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.

33 Choosing Wisely Claims-Based Technical Specifications
34 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 11 Choosing Wisely measures found in this report. For more detailed information on the technical specifications, see the Choosing Wisely Claims-Based Technical Specifications document.

- **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.

- **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.

- **CT scans for sinus infections**: The ratio of patients who received a CT scan within 30 days who had a primary diagnosis for acute sinusitis, divided by the population of patients with a primary diagnosis for acute sinusitis.

- **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 scan) 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 scans 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.

- **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 smear 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 smear 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.

- **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 receive 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 ambulatory care. The report relies upon a database containing claims data from approximately 3.3 million commercial and Medicaid enrollees from 20 different data suppliers (health plans, self-funded employers and labor union trusts).

The commercial and Medicaid population in this report represent those people who had full insurance benefits in the measurement year from July 1, 2011 to June 30, 2012. Measures that look beyond the measurement year include a look-back time period of January 1, 2004 to June 30, 2012.

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.

Understanding the maps

The statistically significant results can be found in the state maps found in this report, with each county colored either red (worse than average), green (better than average) or yellow (meets 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 worse or better rating, the county’s rate and confidence interval must be completely outside (above and below) the state’s confidence interval. This statistical methodology results in some common confusion when a county may show a higher rate than the state average but is not colored differently, when, in fact, it was found to not be statistically different.
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 three million covered lives included in this report, it is likely that some patients marked as receiving unnecessary care may in fact have received care appropriately. Even with the measure specifications excluding the majority of potential scenarios, a small margin of error is expected.

_The data provides a unique “apples to apples” comparison across counties for both Medicaid and commercial health plans, providing a reasonable and useful overview of the state of health care waste in Washington._

Online resources

_P providors, 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 or contact us to learn more about activities in Washington state._

National resources

- Choosing Wisely
  - _Specialty societies recommendations_: complete list of Choosing Wisely recommendations
  - _Consumer Health Choices_: brochures and materials for providers and consumers

Washington resources

- _Washington State Choosing Wisely Task Force_
  - _Choosing Wisely Claims-Based Technical Specifications_: details on the measures used in this report
  - _Videos from Choosing Wisely luncheon_: local videos from the Fall 2013 kick-off event
• Washington Health Alliance
  o Own Your Health: a consumer website with Choosing Wisely information and resources
  o Spotlight on Improvement: Choosing Wisely articles as part of the Alliance’s monthly Spotlight on Improvement series

• Washington State Medical Association
  o Know your Choices, Ask your Doctor: a website for providers about Choosing Wisely resources

Acknowledgements
This report was prepared by the Washington Health Alliance. We extend special thanks for the invaluable feedback and guidance received from the Alliance’s Quality Improvement Committee, representing physician leaders across the state, and the Washington State Choosing Wisely Task Force. A special thanks also to the following individuals for their careful review and feedback on this report:
  • Christopher Dale, MD, Swedish Health Services
  • Dan Kent, MD, Premera Blue Cross
  • Francis Mercado, MD and Kim Orchard, RPh, CHI Franciscan Health
  • Matthew Handley, MD, Group Health Cooperative
  • Pat Kulpa, MD, Regence Blue Shield
  • Scott Kronlund, MD, Northwest Physicians Network

The Alliance would also like to acknowledge the Washington State Medical Association and the Washington State Hospital Association, with whom we’ve been fortunate to partner on this project and others to improve the quality of care in the state. Additionally, the generosity of Premera Blue Cross and Group Health Cooperative is appreciated for providing initial code sets for the measures. Finally, the Alliance acknowledges the great consumer resources provided by Consumer Reports and the generous support of the Robert Wood Johnson Foundation and the ABIM Foundation.

Contact Information
For more information on this report, contact Teresa Litton, MPH at 206-454-2953 or tlitton@wahealthalliance.org.
ABOUT THE ALLIANCE

The Washington Health Alliance brings together those who give, get and pay for health care to create a high-quality, affordable system for the people of Washington state. The Alliance is a nonprofit, nonpartisan organization that shares the most reliable data on health care quality and value in the state to help providers, patients, employers and union trusts make better decisions about health care. Through innovative strategies and initiatives, we help the entire health care system—from exam room to board room—focus on improving quality and value. We are committed to being the catalyst for change for the health care system in Washington. The Alliance is one of 16 organizations that are part of the Robert Wood Johnson Foundation’s Aligning Forces for Quality (AF4Q) initiative.