# First, Do No Harm

## Calculating Health Care Waste in Washington State

**December 2018**


WASHINGTON HEALTH ALLIANCE

Leading health system improvement

# Acknowledgements

This report has been prepared by the Washington Health Alliance and is associated with the Choosing Wisely® initiative in Washington state, an effort co-sponsored by the Washington Health Alliance, the Washington State Medical Association and the Washington State Hospital Association since 2015. The organizations currently represented on the Washington State Choosing Wisely Task Force are listed in Appendix D.

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## MedInsight Health Waste Calculator™

We would like to acknowledge that much of the language used in this report to describe specific measures in the Health Waste Calculator is sourced from the "MedInsight Health Waste Calculator Clinical Guides" (Rev: February 2018). We appreciate the detail and thoughtful consideration offered by this resource and are grateful that the Alliance was able to incorporate it into this report.

**For more information about the Milliman Health Waste Calculator ™:**
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*Disclaimer: The results included in this report were generated using the Milliman MedInsight Health Waste Calculator (Calculator) and the All Payer Claims Database of the Washington Health Alliance. The Washington Health Alliance and Milliman make no warranties with regard to the accuracy of the Calculator Intellectual Property or the results generated through the use of the Calculator and Alliance data. Neither Milliman nor the Alliance will be held liable for any damages of any kind resulting in any way from the use of results included in this report.*

# Table of Contents

# About this Report

The Washington Health Alliance (the Alliance) utilized the Milliman MedInsight Health Waste Calculator™ to produce this report, our second analysis of low-value health care services in Washington state. The Washington Health Alliance maintains an All-Payer-Claims-Database (APCD) for Washington, including over 4 million insured lives (commercial and Medicaid).

The Health Waste Calculator analyzes insurance claims data to identify and quantify overused health care services as defined by initiatives such as the Choosing Wisely campaign and the U.S. Preventive Services Task Force. We utilized the most recent version of the Health Waste Calculator (Version 7) for this analysis, which includes 48 measures of common treatment approaches known by the medical community to be overused. A more detailed description of the Health Waste Calculator, along with a list of the 48 measures, is included in the Appendix.

Throughout this report we use the terms *overuse, low-value and waste* interchangeably. All refer to the same thing: medical treatments, tests and procedures that have been shown to provide little benefit in particular clinical scenarios and in many cases have the potential to cause physical, emotional and financial harm to patients.

Unless otherwise specified, the results in this report are based on a one-year measurement period, from July 1, 2016 through June 30, 2017.

# Executive Summary

- This report includes results for both commercially insured and Medicaid insured individuals in Washington state. For purposes of this analysis, 4,357,768 distinct members were included; this total includes 2,227,570 commercially insured individuals, and 2,130,198 Medicaid insured individuals.
- Results in this report reflect examination of 48 common treatments, tests and procedures known by the medical community to be overused.
- Across the 48 measures, for both lines of business combined:
    - **2,934,526** services were measured, totaling an *estimated* spend of $849 million
    - **47.2%** of measured services were found to be wasteful (1,383,720)
    - 2,034,761 individuals received services: **50.1%** (1,020,081) received low-value services
    - An *estimated* **$341 million** was spent on low-value care
- The overall "Waste Index" (i.e., the percentage of total services examined that are considered likely wasteful or wasteful) is slightly higher for the commercially insured population than for the Medicaid insured population (48.6% versus 45.5%).
- Many of the top areas of waste are the same for both populations, but there are a few differences in how the services are ranked for each line of business (see ranking detail in Appendix B).
- Ten out of 48 areas of waste measured account for 88% of the total waste in this analysis.
- The overall results in this report are similar to those that were included in our first report, "First, Do No Harm," released February 2018, although this analysis was based on a substantially larger population. This suggests a strong practice pattern for these areas of care.
- Version 7 of the Health Waste Calculator includes some new measures; one of these measures is "Opiates Prescribed for Acute Low Back Pain in the First 4 Weeks." This measure addresses a topic of great concern in Washington state and the results from the Health Waste Calculator indicate that it should continue as a focus area.

# Tackling Health Care Waste and Reducing Harm

The old adage, *"willful waste makes woeful want,"* - or the shorthand version, "waste not, want not" - means that prudent use of limited resources today will keep one from having to do without tomorrow.

Today, and for decades past, the American health care system has been anything but prudent. We act as though health care resources are limitless, doing too much to and for some people, while not nearly enough for others, without consistency or transparency in the quality and costs of these services. Discussions about more prudent use, specifically eliminating *unnecessary* services, have not been able to get past counterproductive and emotional rhetoric about "rationing and denying" care, or flat-out denials that waste in the system exists.

Continuing down the path of unnecessary care is *willful waste*. In doing so, we are harming people – physically, emotionally and financially – and setting ourselves up for *woeful want* tomorrow. It's time we move the conversation forward and face some hard truths about health care in our country:

- The predominant form of payment for health care is fee-for-service. Services are unbundled and each paid for separately without regard to quality or outcome. This gives a strong incentive for providers and provider organizations to do more because payment is based on quantity – not quality. Fee-for-service payment doesn't differentiate between necessary and unnecessary health care and it is blind to the financial harm inflicted on individuals and families by waste.
- Healthcare expenses are often unexpected. Forty percent of Americans say they cannot cover a $400 unexpected expense without selling something or borrowing money[1]. Hypothetically, 44% of patients in one survey said they would not seek care if their out-of-pocket costs reached $500, even if this put their health at risk[2].
- Approximately one in five Americans has medical debt actively in collections. In some states, more than one-third of adults are in debt because of medical expenses[3].
- Average per person expenditures for health care exceeded $10,000 in 2017, which was close to 20% of median household income nationwide. By 2026, per person expenditures are projected to be more than $16,000[4]. Patients with multiple chronic diseases can spend upwards of $57,000 per year on their health care[5].

# Tackling Health Care Waste and Reducing Harm

- Commonly used high deductible health plans, with annual consumer out-of-pocket expenses as much as $6,650 for a single person and $13,300 for a family, are intended to give consumers "skin in the game." Unfortunately, for far too many, the significant burden of high health care costs is anything but a game and people are forced to make painful choices between paying medical bills or paying for food, heating, housing, etc.
- Hundreds of billions of dollars are spent each year treating Americans who are in the last weeks of life. Yet there is persistent underfunding of initiatives to prevent costly infectious and chronic diseases or to support the country's public health system.
- By 2026, national health spending is projected to reach $5.7 trillion and represent one-fifth of our Gross Domestic Product. Federal, state and local governments will pay for close to one-half of national health spending. Disproportionate spending on health care derails public spending on other societal priorities like education, transportation infrastructure and defense. We are already seeing this and it will only get worse over time. And it is not just the public sector that is affected. Warren Buffett, Berkshire-Hathaway chairman and CEO, has said that "health care is a tapeworm on the U.S. economy" and that it is significantly impacting the ability of private U.S. enterprise to expand, innovate and compete globally[6].
- Estimates vary, but most health care experts agree that about one-quarter to one-third of what we spend on health care in this country is waste. There are numerous contributors to waste to be sure, **but among them is the continued provision of *unnecessary* medications, tests and procedures – impacting millions of people and costing billions of dollars nationwide every year.**

Tackling health care waste and reducing harm is a massive undertaking and it will take all of us pulling together to make a difference. But we need to start now. We have not only a moral imperative, but a business imperative to move beyond the forces that shelter wasteful and harmful health care practices from scrutiny and intervention.

The results from this analysis identify several specific areas of care that are overused – it's certainly not the whole picture (or even close to it), but it is an excellent place to get started in reducing waste in Washington state. Let's get going!

# A Call to Action

Our **CALL TO ACTION** includes a role for everyone.

- Clinical leaders must take up the mantle and lead provider efforts to incorporate reduction of overuse *into local practice culture*. Appropriateness must be a key criterion for high quality at every step in the care process.
- The concepts of "choosing wisely" and shared decision-making must be the bedrock of patient-provider communication. The potential benefits, risks and costs associated with different treatment options must be made known to patients BEFORE things are done so patients have the opportunity to decide what is right and manageable for them, given their preferences and life circumstances.
- Healthcare purchasers and payers need to keep their collective "foot on the gas" to implement value-based payment for health care services (versus paying for volume). We must align contracting requirements and financial incentives with the outcomes we wish to see: high quality (including clinically appropriate care and reduction of waste) and excellent patient experience at an affordable and fair price.
- Measuring value in health care must include measures of overuse, along with measures of underuse of effective care, patient experience and cost. Knowing specifically where to target efforts is an important step in addressing overuse.
- **And, perhaps most important**, overuse and patient harm must become central to *honest* discussions of health care value in Washington state. This is the starting point. Perpetual denials of the problem are part and parcel of willful waste. Healthcare purchasers, providers, insurers and consumers need to set aside blame, finger-pointing and denial and instead **acknowledge, collaborate and align actions** to reduce waste and patient harm.

# What do we mean by waste or low-value care?

We acknowledge that the word "waste" makes some in health care delivery bristle; they suggest using the terminology "low-value care." Others representing employers, union trusts, health insurers and even provider organizations, tell us to use the word waste – they say, "that's what it is, call it out." So, in this report we use all the terms (waste, overuse, low-value) interchangeably. Regardless of the terminology, we are talking about **medical treatments, tests and procedures that have been shown to provide little benefit in particular clinical scenarios and in many cases have the potential to cause physical, emotional and financial harm to patients.**

Overuse occurs when health care services are provided with a higher volume than is appropriate. "Appropriate" in this context, means health care that is:

- Supported by well-established evidence;
- Truly necessary to improve the outcome of care for a particular patient;
- Not duplicative of other tests or procedures already received; and
- As free from harm as possible.

Overuse is a pervasive problem in health care, with no medical specialty immune from wasteful practices. The ABIM Foundation issued a challenge to national medical specialty organizations that represent a wide array of physicians, asking them to identify frequently ordered tests, procedures or treatments in their field whose necessity should be actively questioned – in other words, they were seeking to identify those things *known by the medical profession* to be overused, wasteful and potentially harmful. Today, there are more than 550 Choosing Wisely recommendations from 80+ medical specialty societies and we are confident that this is just the tip of the iceberg.

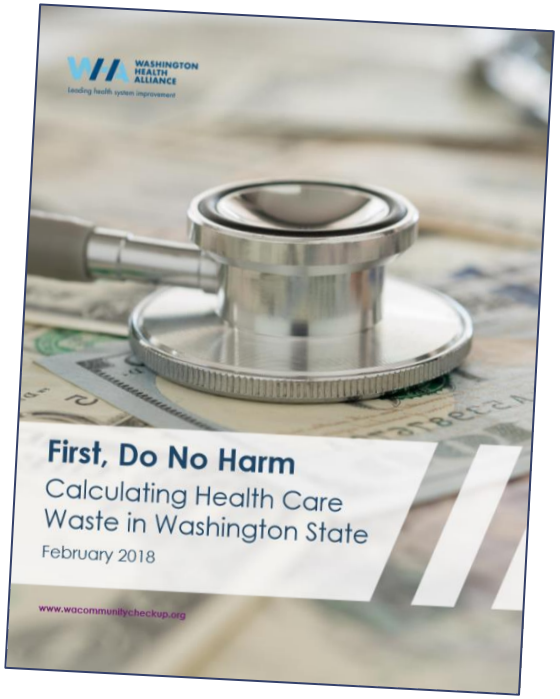
In Washington state, the Choosing Wisely initiative is ongoing. The Washington Health Alliance has joined with the Washington State Medical Association (WSMA) and the Washington State Hospital Association (WSHA) to co-sponsor the Choosing Wisely campaign in our state. Washington state's flagship project for the initiative is the Choosing Wisely Task Force[7]. This is a unique effort that unites medical leaders representing the state's diverse range of health care organizations. It is an energized and dedicated group focused on implementing appropriate and high-value care.

# “First, Do No Harm” . . . Our first results

In February 2018, the Washington Health Alliance released its first report, “First, Do No Harm.” This report, endorsed by the Washington State Choosing Wisely Task Force, included our first results on health care waste in Washington state.

Using the 47 measures included in the MedInsight Health Waste Calculator at the time (Version 5), we found the following for 2.4 million *commercially insured* residents of Washington state:

- 1.52 million services were examined: **45.7%** were determined to be low-value
- 1,298,862 individuals received services: **47.9%** (622,341) received low-value services
- An estimated $785 million was spent on services: **36%** (approximately $282 million) was spent on low-value services




These results were groundbreaking, demonstrating that just a handful of health care services account for millions of dollars of waste and impact hundreds of thousands of Washington residents annually.

Find the report here:
https://www.wacommunitycheckup.org/highlights/calculating-health-care-waste-in-washington-state-feb-2018/


# NEW Results from the Health Waste Calculator

# New Results from the Health Waste Calculator

In this new report, the Alliance has refreshed its results using the latest version of the Health Waste Calculator (Version 7) which now includes 48 measures, including six new measures and the modification or elimination of several other measures. A complete list of measures is included in Appendix D. The 48 measures are grouped into six categories: Common Treatments (prescribing), Diagnostic Testing, Disease Approach, Preoperative Evaluation, Routine Monitoring/Follow-up, and Screening Tests.

This report includes results for both commercially and Medicaid-insured individuals in Washington state. For purposes of this analysis, 4,357,768 distinct members were included; this total includes 2,227,570 commercially insured individuals, and 2,130,198 Medicaid insured individuals.

Unless otherwise specified, the measurement year used for this analysis was July 2016 – June 2017.

**Across the 48 measures**, for both lines of business combined:

- **2,934,526** services were measured, totaling an estimated $849 million
- **47.2%** of measured services were found to be wasteful* (1,383,720)
- 2,034,761 individuals received services: **50.1%** (1,020,081) received low-value services
- An *estimated* **$341 million** was spent on low-value care

The Health Waste Calculator includes situational intelligence that creates an assessment of the degree of waste. You'll see below that the "Likely Wasteful" results are a very small percentage of the total" Wasteful." Throughout this report, the "Waste Index" refers to a combination of Likely Wasteful and Wasteful.

- Necessary = 1,550,806 services (53% of total services)
- Likely Wasteful = 49,627 services (2% of total services)
- Wasteful = 1,334,093 services (45% of total services)

*Includes Likely Wasteful and Wasteful

# Caveats

**For all of the following reasons, these results should be viewed as *directional*, rather than absolute.**

The version of the Calculator used for this report includes 48 measures, representing a subset of the total potential areas of low-value healthcare in our state. *Extrapolation of these results to other types of care is not advised.*

The results in this report are based on an analysis of claims data for approximately 4.3 million residents of Washington state. Results should be viewed as an estimate of low-value services rather than a comprehensive analysis of services received by *all* Washingtonians during the measurement period. *Extrapolation of these results to other populations is not advised*.

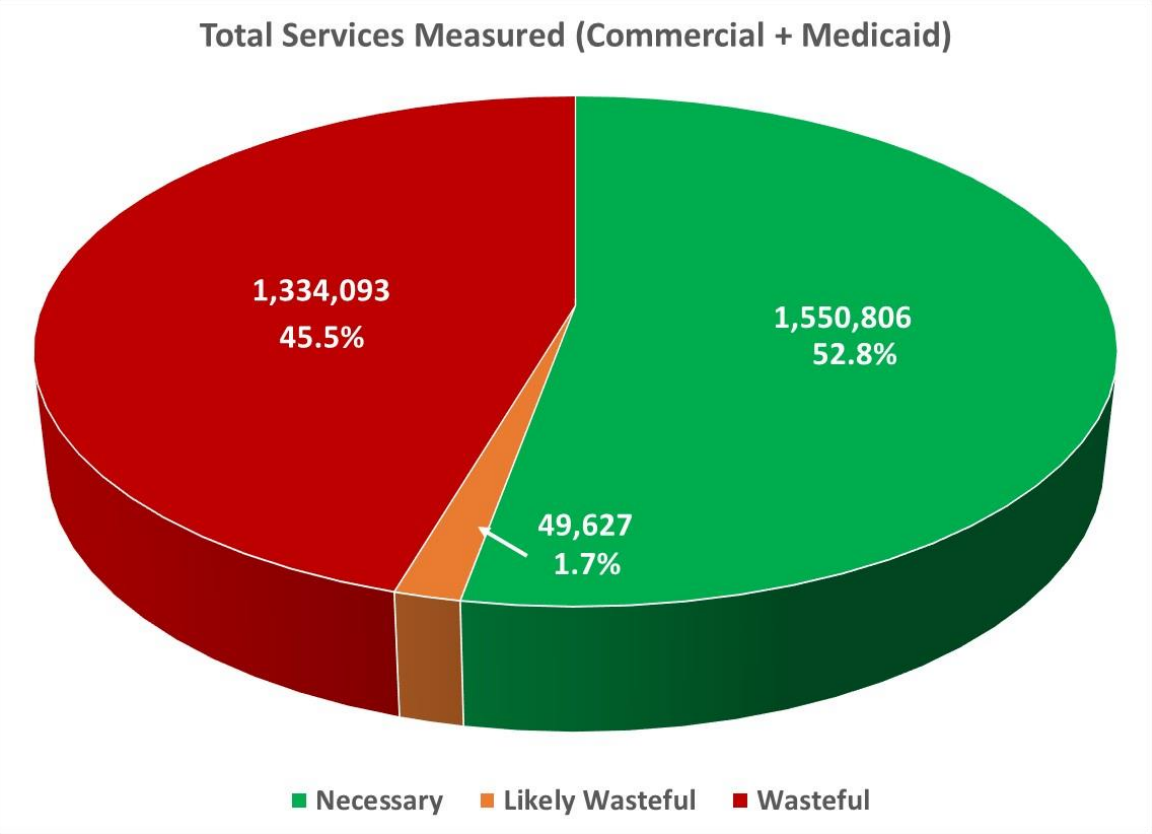
The prevalence of waste noted in utilization figures throughout this report, including number of services and individuals impacted, is based on *actual* utilization as measured through insurance claims.

The cost figures in this report are *estimated*, based on Milliman's Consolidated Health Cost Source database for Washington state. Estimated costs are based on reference unit prices that represent the average cost of each service. Reference pricing for *allowed amounts* was used and estimates are based on the "case rate" method included in the Health Waste Calculator[8].

Noted costs are only associated with the particular service in question, including professional and facility charges. Costs do not include subsequent unnecessary tests, procedures, treatments, inpatient or post-acute care that subsequently resulted from the initial unnecessary intervention – this is called "cascading harm." Given this, the estimated costs noted in this report likely underestimate the financial impact of overuse in our state.

When using claims data, there is always a time lag. The results in this report are from July 2016 - June 2017. We acknowledge that performance improvement may have occurred since June 2017. In addition, there are inherent limitations when using claims data to identify "signs and symptoms" and for this reason, the Calculator tends to be conservative in its assessment (i.e., more likely to assign a service to "necessary" if there is uncertainty).

# Health Waste Calculator Results
# Overall (Commercial, Medicaid Combined)




48 Measures, 1 Year

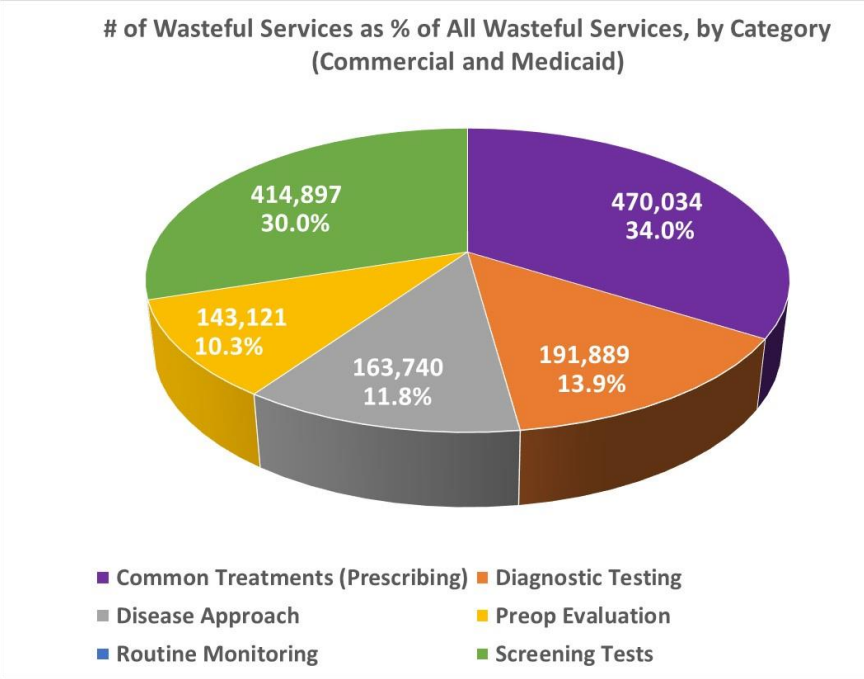
2,934,526 services were examined

**47.2%** of services (1,383,720) were determined to be low-value*

*Low-value includes Likely Wasteful + Wasteful

# Wasteful Services by Measure Category (Commercial and Medicaid Combined)

The 48 measures included in the Health Waste Calculator are grouped into six categories to organize results by types of care. The six categories are shown below (see Appendix C for a list of measures in each category). Wasteful services in the Common Treatments (prescribing) and Screening Tests categories account for almost two thirds of all wasteful services measured in this analysis. The waste index varies considerably based on the category.




| Category | # of Measures | Total # of Services Measured | Total # of Wasteful Services* | Waste Index* |
|---|---|---|---|---|
| Common Treatments | 5 | 486,449 | 470,034 | 96.6% |
| Diagnostic Testing | 19 | 320,095 | 191,889 | 59.9% |
| Disease Approach | 11 | 592,976 | 163,740 | 27.6% |
| Pre-op Evaluation | 4 | 230,152 | 143,121 | 62.2% |
| Routine Monitoring | 1 | 39 | 39 | 100% |
| Screening Tests | 8 | 1,304,815 | 414,897 | 31.8% |
| Total | 48 | 2,934,526 | 1,383,720 | 47.2% |

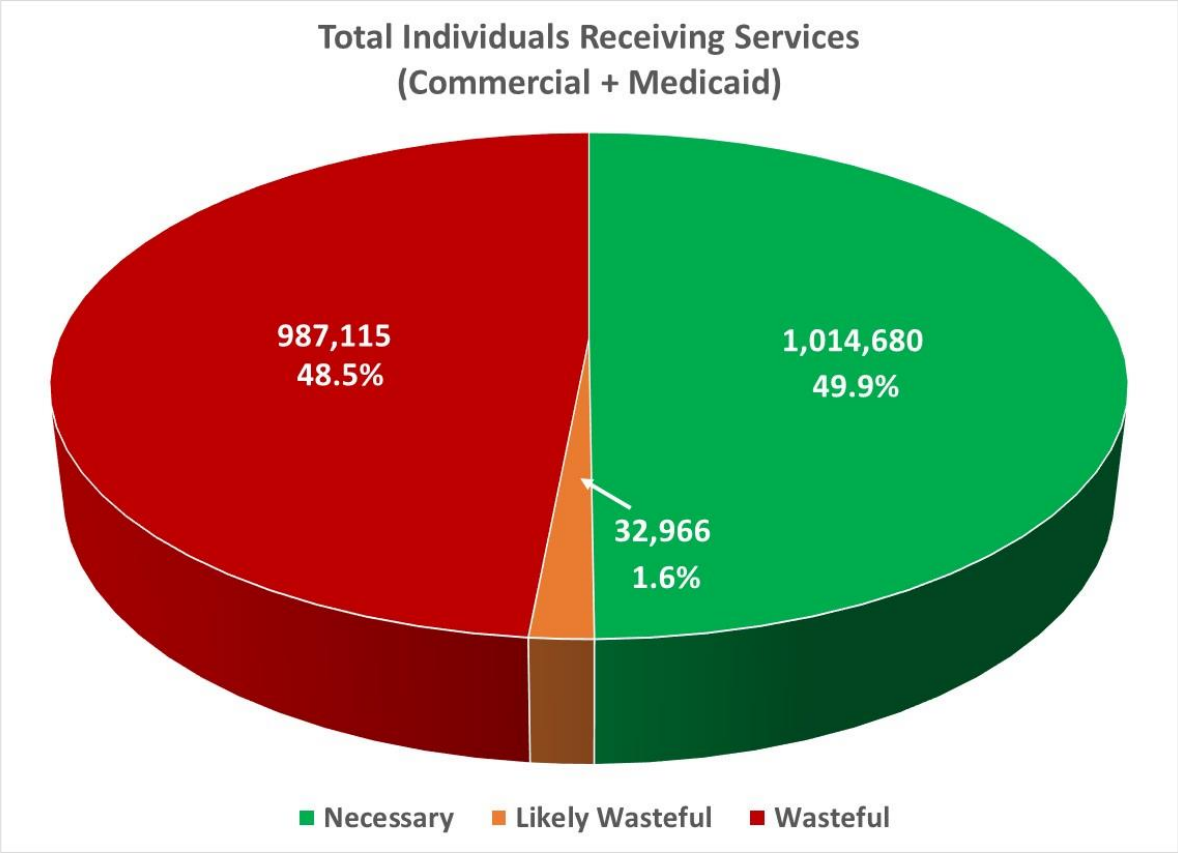
*Includes Likely Wasteful and Wasteful
Routine Monitoring (not included in chart above) = <1%

# Number of Services by Measure Category and Line of Business

| Measure Category | COMMERCIAL | | | | MEDICAID | | | |
|---|---|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Waste Index* | Necessary | Likely Wasteful | Wasteful | Waste Index* |
| Common Treatments | 9,002 | 12,902 | 202,773 | 96% | 7,413 | 24,142 | 230,217 | 97% |
| Diagnostic Testing | 88,361 | 4,545 | 120,625 | 59% | 39,845 | 3,556 | 63,163 | 63% |
| Disease Approach | 122,463 | 48 | 29,400 | 19% | 306,773 | 61 | 134,231 | 30% |
| Pre-op Evaluation | 53,368 | 0 | 89,143 | 63% | 33,663 | 0 | 53,978 | 62% |
| Routine Monitoring | 0 | 0 | 30 | 100% | 0 | 0 | 9 | 100% |
| Screening Tests | 528,264 | 2,568 | 295,072 | 36% | 361,654 | 1,805 | 115,452 | 25% |
| TOTAL | 801,458 | 20,063 | 737,043 | 48.6% | 749,348 | 29,564 | 597,050 | 45.5% |
| % of TOTAL | 51.4% | 1.3% | 47.3% | | 54.5% | 2.1% | 43.4% | |

*Includes Likely Wasteful and Wasteful

# Health Waste Calculator Results
# Overall (Commercial, Medicaid Combined)




48 Measures, 1 Year

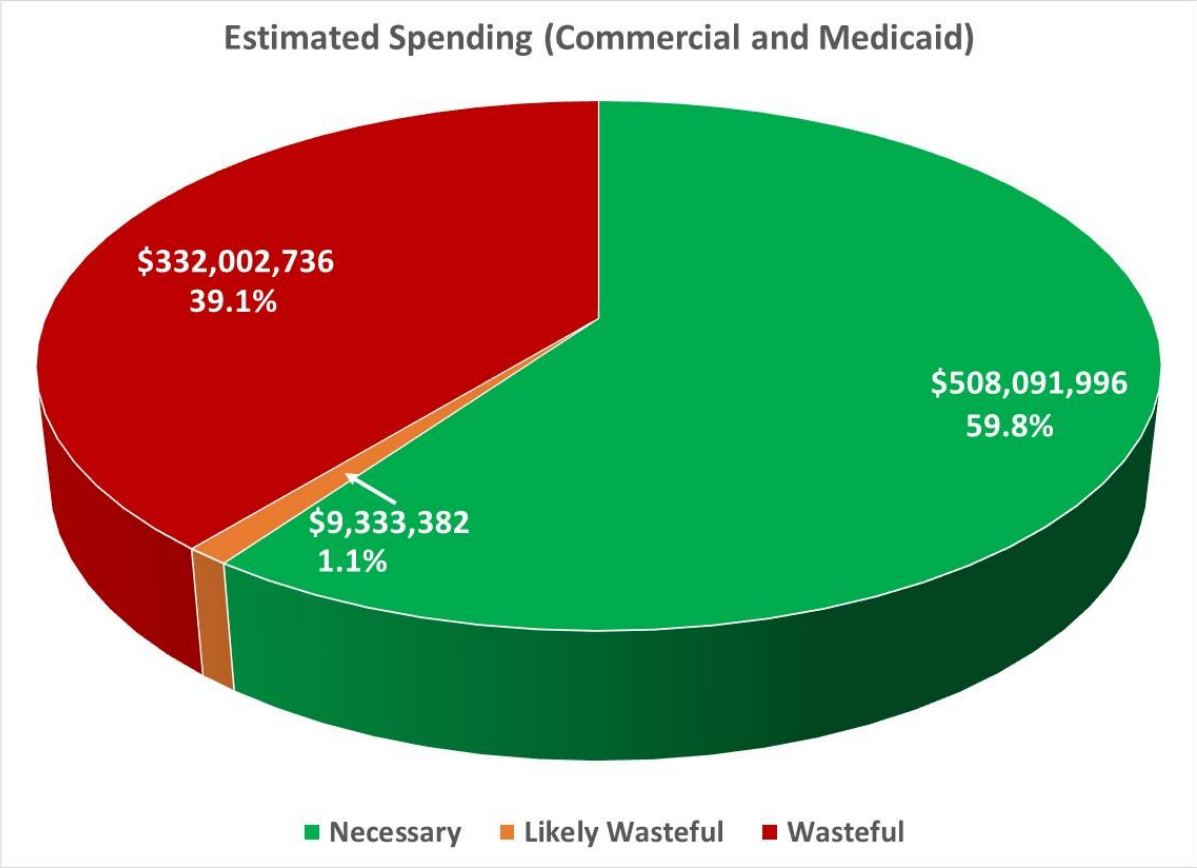
2,034,761 individuals* received services

**1,020,081 (50.1%)** individuals* received low-value** services

* Individuals counted each time they receive a service (i.e., *distinct* individuals are counted more than once if they receive more than one service)

** Low-value includes Likely Wasteful + Wasteful

# Health Waste Calculator Results
# Overall (Commercial, Medicaid Combined)




48 Measures, 1 Year

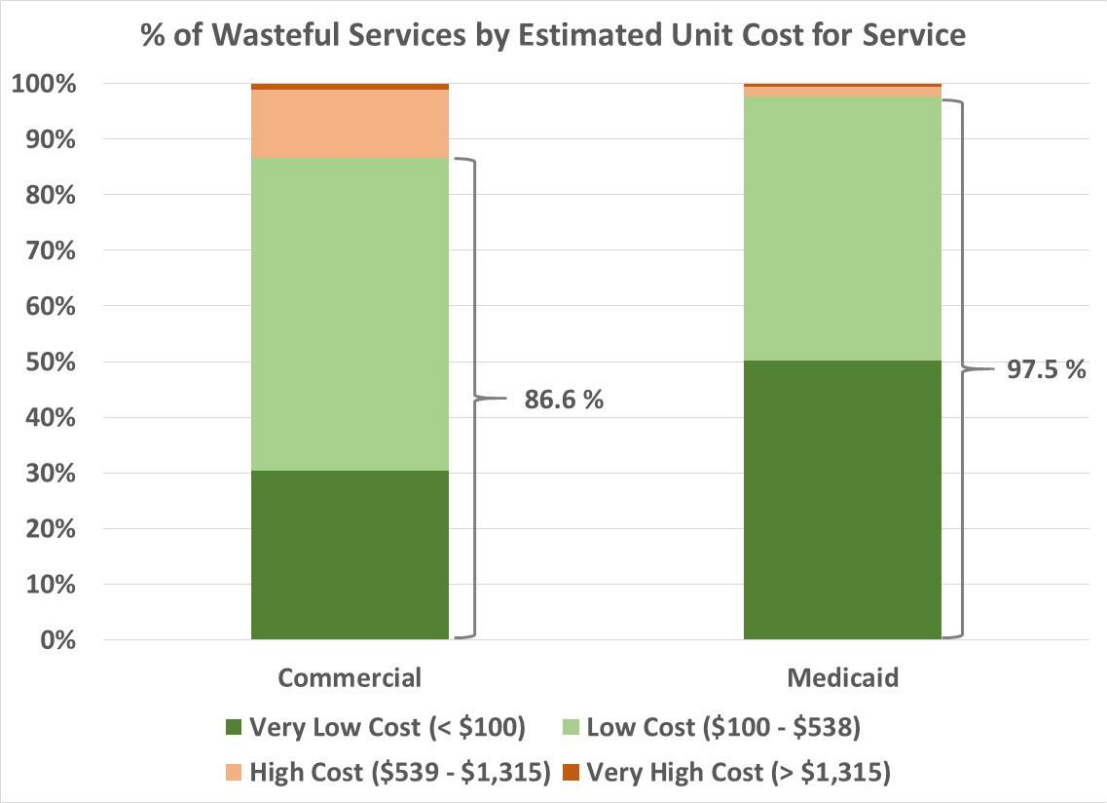
Approximately $849 million was spent

Approximately **$341 million (40.2%)** was spent on low-value* services

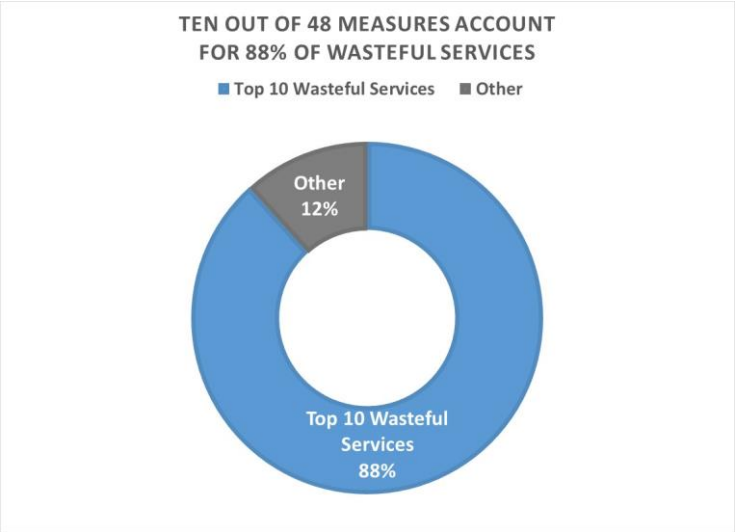
*Low-value includes Likely Wasteful + Wasteful

# Low-Cost, Low-Value Services are a Big Driver

In October 2017, a break-through article in *Health Affairs*[9] identified that low-cost, high-volume services were a major contributor to unnecessary health spending. Using the same cost categories, we examined our data to ascertain whether this pattern, first identified in the state of Virginia using the Health Waste Calculator, held true in Washington state. Indeed, 92% of all wasteful services found in this analysis (for the combined commercial and Medicaid populations) were very low-cost (<$100) or low-cost ($100 - $538); this compares to 93% in the Virginia study. Very low or low-cost services account for 60% of the estimated spend on wasteful services overall in this analysis; this compares to 65% in the Virginia study. The break-down for each line of business in Washington shows some differences.



# Targeting Key Drivers of Waste




**Ten out of 48 measures account for 88% of the waste measured for the combined population** (commercial and Medicaid). These ten include the following which are listed in priority order *based on the number of wasteful services measured*.
(See Appendix C for Top 10 ranking based on estimated spend)

1. Opiates for Acute Low Back Pain in the First Four Weeks
2. Antibiotics for Upper Respiratory and Ear Infections*
3. Annual EKGs or Cardiac Screening for Low-Risk Individuals*
4. Imaging Tests for Eye Disease*
5. Preoperative Baseline Laboratory Studies Prior to Low-Risk Procedures*
6. Two or more concurrent antipsychotic medications
7. Routine PSA Screening for Prostate Cancer*
8. Cervical Cancer Screening for Women*
9. Screening for 25-OH-Vitamin D Deficiency*
10. Prescribing NSAIDs for Hypertension, Heart Failure or Chronic Kidney Disease

These ten are described in more detail on the following pages, including a delineation of results for commercial and Medicaid separately. Seven of the ten areas of waste listed above were also among the top areas of waste from our first report (February 2018); these are noted above with an asterisk (*).

# #1: Opiates Prescribed for Acute Low Back Pain

This is a new measure in the Health Waste Calculator. This measure examines opiate prescriptions that are in conjunction with a diagnosis of low back pain for people 18 years and older. Acute back pain is defined as back pain lasting less than four weeks, therefore the span of this measure is four weeks.

Association with Choosing Wisely (CW): American Academy of Physical Medicine and Rehabilitation (September 2015): *Don't prescribe opiates in acute low back pain before evaluation and a trial of other alternatives is considered.*

Low back pain is one of the most common reasons for physician visits in the United States. Most patients with acute back pain have self-limited episodes that resolve on their own. As per the American College of Physicians, non-pharmacologic treatment such as superficial heat, massage, acupuncture, etc., should be the first choice of treatment. When pharmacologic treatment is considered, nonsteroidal anti-inflammatory drugs are recommended. Early use of opiates for low back pain is associated with longer disability, increased surgical rates, and a greater risk of opioid use later.

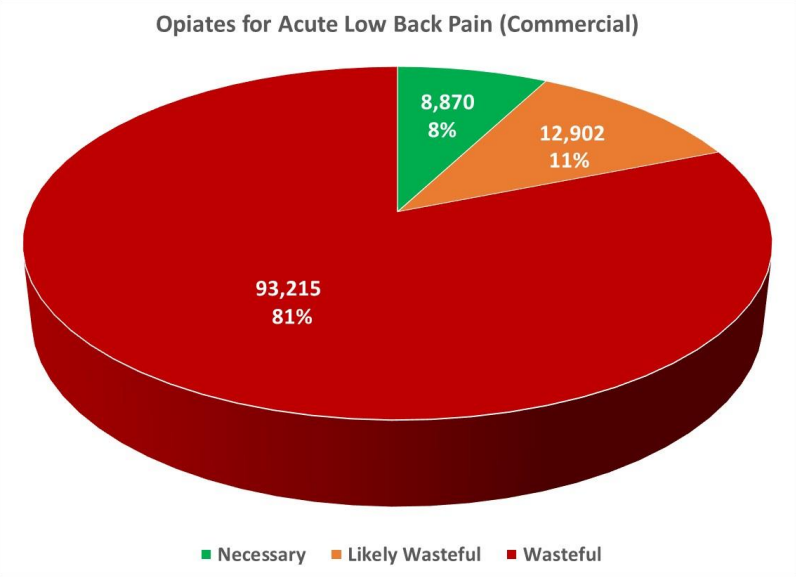
A great deal of work has been done in Washington state, including the development of detailed guidelines on prescribing opiates for acute pain management. Please see guidelines developed by the Washington State Bree Collaborative: http://www.breecollaborative.org/topic-areas/opioid/

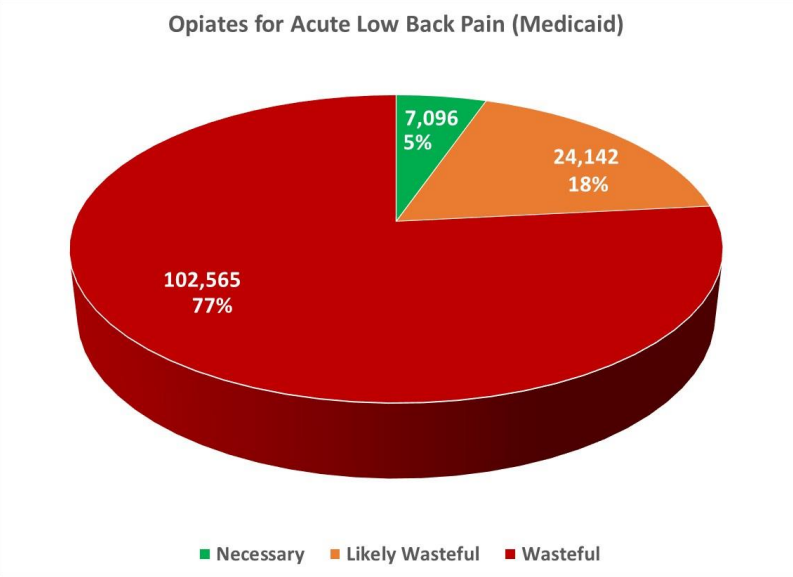
In this measure:

- Prescriptions for members with low back pain who receive a prescribed opiate and who have a diagnosis of cancer or sickle cell anemia are considered *Necessary*.
- Prescriptions for members with low back pain who receive a prescribed opiate and who have a prior prescription of anti-inflammatory drugs, tramadol or duloxetine are considered *Likely Wasteful*.

# Opiates Prescribed for Acute Low Back Pain

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 92% for the commercially insured population and 95% for the Medicaid insured population. **A total of 232,824 wasteful services were delivered, impacting 105,906 individuals at an estimated cost of $13.1 million**[8,10]. This was ranked as the #1 area of waste for the Medicaid insured population, based on the number of wasteful services (versus #3 for the commercially insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Opiates, Low Back Pain | 4,543 | 7,615 | 42,011 | 3,125 | 13,069 | 43,211 |

# Educational Materials: Opiate Prescribing

The Washington Health Alliance, together with the Bree Collaborative, developed two educational fact sheets – one for consumers and one for providers. These are readily available for public use here: http://www.breecollaborative.org/topic-areas/opioid/

WASHINGTON HEALTH ALLIANCE
Leading health system improvement

DR. ROBERT BREE COLLABORATIVE

## Opioid Medication & Pain: What You Need to Know

If you've had an injury, surgery or major dental work, you are likely to have pain. Pain is a normal part of life and healing. Talk with your doctor about how you can get the most effective pain relief with the least risk.

### NON-OPIOID PAIN TREATMENTS HAVE FEWER RISKS

For pain that will likely be gone in a week or two, it is always best to start with non-opioid pain treatments. Opioids may help control pain at first, but they are usually not necessary. Consider other options that may work just as well but have far fewer risks.

- Over-the-counter pain relievers
- Physical therapy
- Exercise
- Professional help coping with the emotional effects of pain

### OPIOIDS ARE STRONG PRESCRIPTION MEDICATIONS

Opioids can be the right choice for treating severe pain, such as from cancer or immediately after major surgery. However, medications such as Vicodin, Percocet and OxyContin are very powerful and can be deadly. Even if you take them as directed, ALL opioids have serious side effects such as addiction and overdose.

### OPIOIDS ARE CHEMICAL COUSINS OF HEROIN AND ARE HIGHLY ADDICTIVE

You can build up a tolerance to opioids over time, so you need to take more and more to get the same relief. The higher the dose, the more dangerous opioids are. You can even become addicted after a short time.

**Commonly prescribed opioids:**

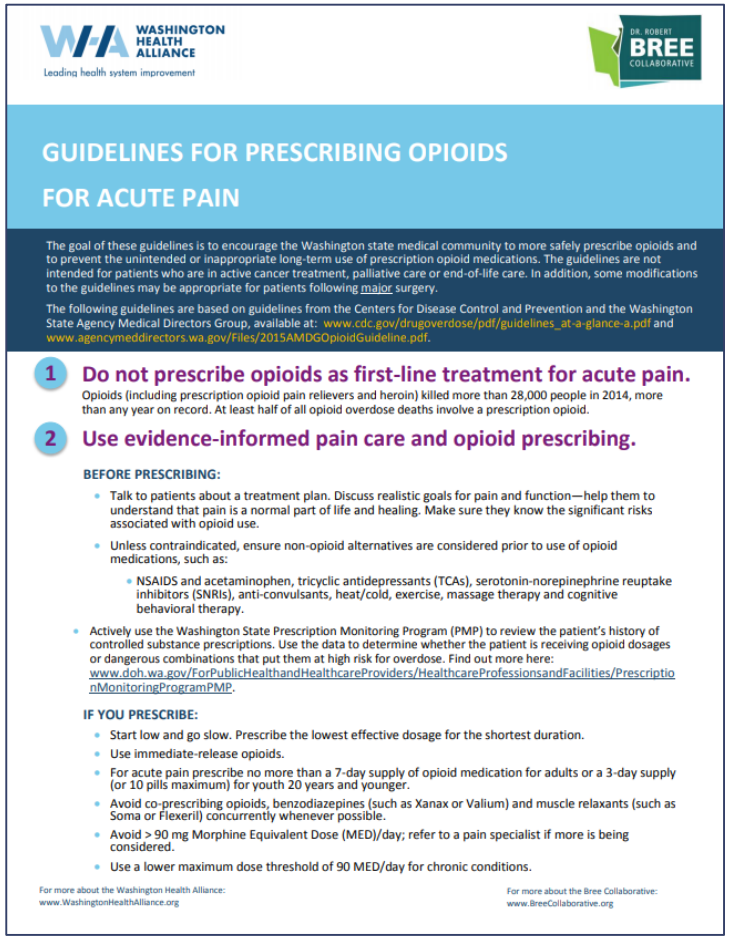
- Codeine
- Dilaudid
- Fentanyl
- Hydrocodone (Vicodin)
- Hydromorphone
- Methadone
- Meperidine
- Morphine
- MS Contin
- Oxymorphone (Opana)
- Oxycodone (OxyContin)
- Percocet

These are only some of the prescription opioids. If you get a prescription for pain, ask your doctor if it is an opioid.

**If you are prescribed an opioid for short-term pain:**

- The prescription should only be for a three- to seven-day supply (often this is as few as 10 pills).
- Take the lowest dose possible for the shortest period of time.
- Always talk with your doctor about managing your pain better **without** taking prescription opioids.

www.WashingtonHealthAlliance.org www.BreeCollaborative.org



WASHINGTON HEALTH ALLIANCE
Leading health system improvement

DR. ROBERT BREE COLLABORATIVE

## GUIDELINES FOR PRESCRIBING OPIOIDS FOR ACUTE PAIN

The goal of these guidelines is to encourage the Washington state medical community to more safely prescribe opioids and to prevent the unintended or inappropriate long-term use of prescription opioid medications. The guidelines are not intended for patients who are in active cancer treatment, palliative care or end-of-life care. In addition, some modifications to the guidelines may be appropriate for patients following major surgery.

The following guidelines are based on guidelines from the Centers for Disease Control and Prevention and the Washington State Agency Medical Directors Group, available at: www.cdc.gov/drugoverdose/pdf/guidelines_at-a-glance-a.pdf and www.agencymeddirectors.wa.gov/Files/2015AMDGOpioidGuideline.pdf.

### 1 Do not prescribe opioids as first-line treatment for acute pain.

Opioids (including prescription opioid pain relievers and heroin) killed more than 28,000 people in 2014, more than any year on record. At least half of all opioid overdose deaths involve a prescription opioid.

### 2 Use evidence-informed pain care and opioid prescribing.

**BEFORE PRESCRIBING:**

- Talk to patients about a treatment plan. Discuss realistic goals for pain and function—help them to understand that pain is a normal part of life and healing. Make sure they know the significant risks associated with opioid use.
- Unless contraindicated, ensure non-opioid alternatives are considered prior to use of opioid medications, such as:
  - NSAIDS and acetaminophen, tricyclic antidepressants (TCAs), serotonin-norepinephrine reuptake inhibitors (SNRIs), anti-convulsants, heat/cold, exercise, massage therapy and cognitive behavioral therapy.
- Actively use the Washington State Prescription Monitoring Program (PMP) to review the patient's history of controlled substance prescriptions. Use the data to determine whether the patient is receiving opioid dosages or dangerous combinations that put them at high risk for overdose. Find out more here: www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/PrescriptionMonitoringProgramPMP.

**IF YOU PRESCRIBE:**

- Start low and go slow. Prescribe the lowest effective dosage for the shortest duration.
- Use immediate-release opioids.
- For acute pain prescribe no more than a 7-day supply of opioid medication for adults or a 3-day supply (or 10 pills maximum) for youth 20 years and younger.
- Avoid co-prescribing opioids, benzodiazepines (such as Xanax or Valium) and muscle relaxants (such as Soma or Flexeril) concurrently whenever possible.
- Avoid > 90 mg Morphine Equivalent Dose (MED)/day; refer to a pain specialist if more is being considered.
- Use a lower maximum dose threshold of 90 MED/day for chronic conditions.

For more about the Washington Health Alliance: www.WashingtonHealthAlliance.org

For more about the Bree Collaborative: www.BreeCollaborative.org

# #2: Antibiotics for Upper Respiratory and Ear Infections

This measure examines antibiotic prescriptions for people three months and older within seven days after the diagnosis of upper respiratory or ear infection, including viral respiratory illness (URI, sinusitis, pharyngitis, bronchitis) or acute otitis externa.

The measure is associated with six Choosing Wisely recommendations: American Academy of Pediatrics (February 2013); Infectious Diseases Society of America (February 2015); American Academy of Allergy, Asthma & Immunology (April 2012); American Academy of Family Physicians (April 2012); American College of Emergency Physicians (October 2014); and American Academy of Otolaryngology – Head & Neck Surgery Foundation (February 2013).

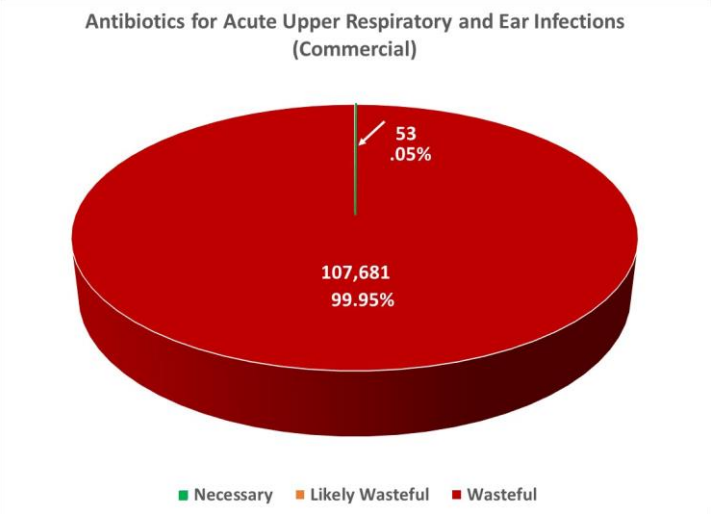
The majority of upper respiratory and ear infections are viral and the use of antibiotic treatment is ineffective and inappropriate. Unnecessary use of antibiotics for viral illnesses can lead to antibiotic resistance.

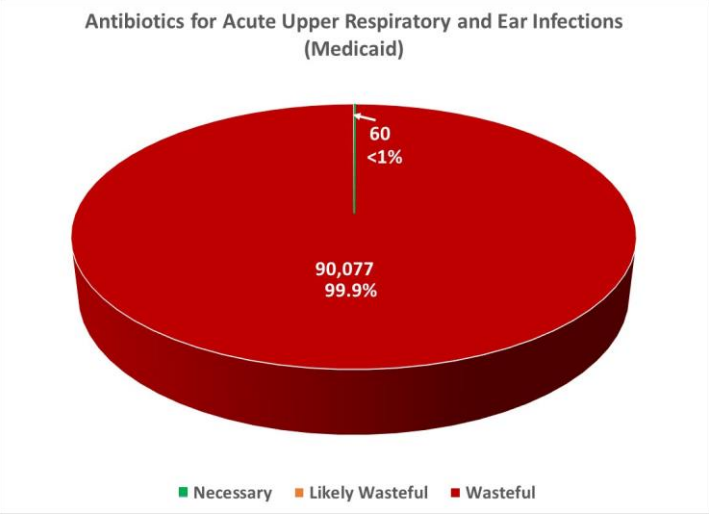
In this measure:

- Prescriptions for members with persistent symptoms of complicated acute rhinosinusitis within ten days prior to the diagnosis of URI are considered *Necessary*.
- Members with (1) malignant otitis externa or (2) acute otitis externa and underlying middle ear disease prior to the antibiotic prescription are considered *Necessary*.
- Antibiotic prescriptions for sinusitis, acute URI, viral respiratory illness, otitis media, tympanostomy tube placement, or acute otitis externa in the presence of co-morbid (e.g., immunocompromised, cancers, etc.) or competing conditions (e.g., cellulitis, tonsillitis, pneumonia, etc.) are excluded from the measure.

# Antibiotics for Upper Respiratory and Ear Infections

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 99.95% for the commercially insured population and 99.93% for the Medicaid insured population. **A total of 197,758 wasteful services were delivered, impacting 173,718 individuals at an estimated cost of $2.8 million**[8,10]. This was ranked as the #2 area of waste for the commercially insured population, based on the number of wasteful services (versus #3 for the Medicaid insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Antibiotics, URI & Ear Infection | 53 | 0 | 94,642 | 60 | 0 | 79,076 |

# #3: Annual EKGs or Cardiac Screening for Low-Risk Individuals

This measure examines the use of annual electrocardiograms (EKGs) or any other cardiac screening for people ages 18 and older who are at low-risk and without symptoms.

Association with Choosing Wisely (CW): American Academy of Family Physicians (April 2012): *Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms.*

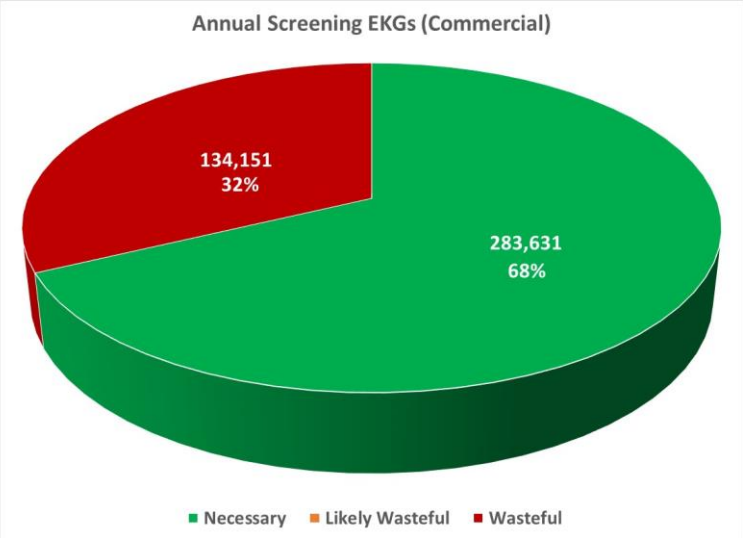
Per the United States Preventive Service Task Force guideline, a resting or exercise EKG is unlikely to provide additional information about coronary heart disease (CHD) beyond that obtained with conventional CHD risk factors (i.e., Framingham risk factors). False positive tests are likely to lead to patient harm through labeling, misdiagnosis, over-treatment and unnecessary invasive procedures.

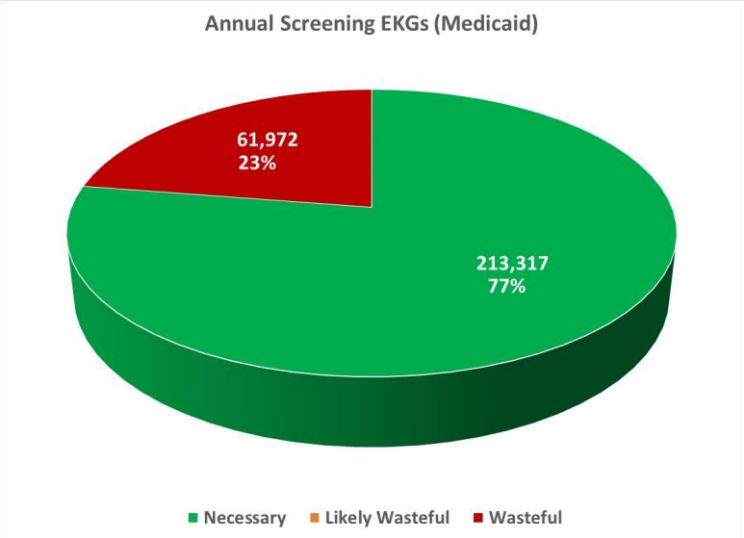
In this measure:

- Screening for members with high-risk markers, risk factors suggestive of intermediate CHD risk and two or more cardiovascular signs and symptoms have been identified as *Necessary*.
- The following have been excluded from this measure:
  - any EKG or other cardiac screening for inflammatory conditions
  - any EKG or other cardiac screening as part of preoperative cardiovascular testing
  - any EKG or other cardiac screening during or within 30 days following an inpatient stay
  - Any EKG or other cardiac screening with low-risk surgery within 30 days on or after the EKG or cardiac screening (EKGs prior to low-risk surgery are accounted for in a different Health Waste Calculator measure)

# Annual EKGs or Cardiac Screening for Low-Risk Individuals

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 32% for the commercially insured population and 23% for the Medicaid insured population. **A total of 196,123 wasteful services were delivered, impacting 179,623 individuals at an estimated cost of $62.2 million**[8]. This was ranked as the #1 area of waste for the commercially insured population, based on the number of wasteful services (versus #4 for the Medicaid insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Annual EKGs, Cardiac Screening | 209,589 | 0 | 123,549 | 142,865 | 0 | 56,074 |

# #4: Imaging Tests for Eye Disease

This measure examines the use of eye imaging tests (posterior and anterior optical coherence tomography, fundus photography, visual field testing, external or internal eye photographs) for all individuals without significant eye disease.

Association with Choosing Wisely (CW): American Academy of Ophthalmology (February 2013): *Don't routinely order imaging tests for patients without symptoms or signs of significant eye disease.;* and, the American Association of Pediatric Ophthalmology and Strabismus (October 2013): *Don't order retinal imaging tests for children without symptoms or signs of eye disease.*

Preferred practice guidelines recommend a comprehensive eye exam at different intervals on the basis of risk factors for eye disease (age, ethnicity, known diabetes). If patients don't have symptoms or signs of significant eye disease pathology, then clinical imaging tests are not generally needed because a comprehensive history and physical exam will reveal if eye disease is present or is getting worse.

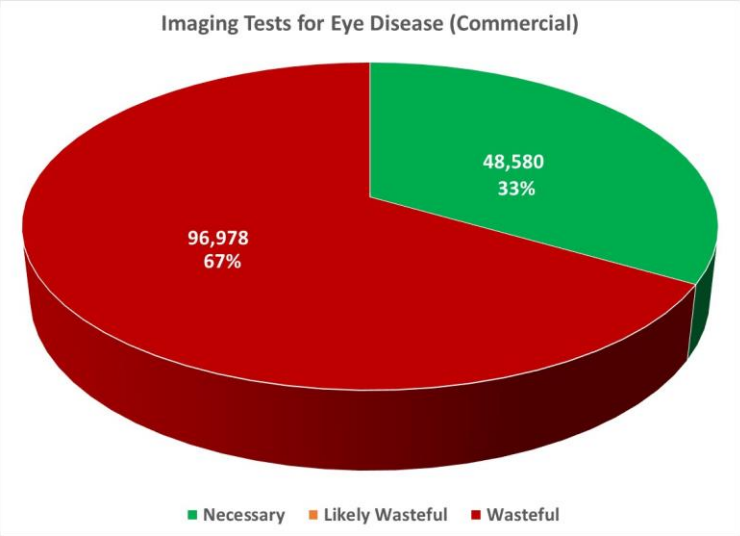
In this measure:

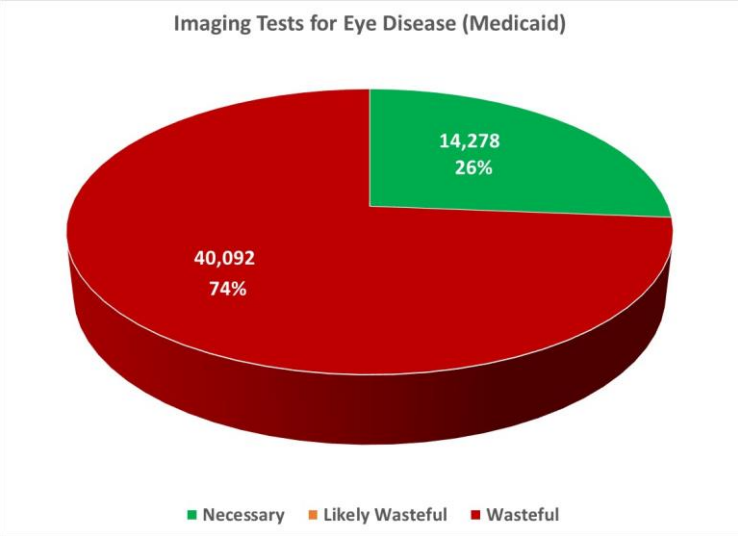
- Significant eye disease such as neoplasms of eye, choroidal detachment, optic atrophy, glaucoma, diabetes, macular degeneration etc. where imaging is considered medically necessary and appropriate *along with* an ophthalmologist visit within 10 days on or prior to the eye imaging have been identified as *Necessary*.
- Members with eye imaging who had a diagnosis that was not indicated for that imaging *or* had an eye imaging and an appropriate diagnosis but did not have an ophthalmologist visit within 10 days on or prior to the eye imaging are considered *Wasteful*.

*NOTE: Because this measure generated multiple questions regarding patients with a diagnosis of diabetes following the February 2018 "First, Do No Harm" report, we have included additional information about this group of patients. See end note #11 (Appendix).*

# Imaging Tests for Eye Disease

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 67% for the commercially insured population and 74% for the Medicaid insured population. **A total of 137,070 wasteful services were delivered, impacting 95,305 individuals at an estimated cost of $40 million**[8]. This was ranked as the #4 area of waste for the commercially insured population, based on the number of wasteful services (versus #6 for the Medicaid insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Imaging for Eye Disease | 35,687 | 0 | 65,480 | 10,688 | 0 | 29,825 |

# #5: Preoperative Baseline Lab Studies Prior to Low-Risk Procedures

This measure examines baseline laboratory studies for people two years of age or older without significant disease (ASA I or II) performed 30 days or fewer prior to undergoing an elective low-risk procedure.

Association with Choosing Wisely (CW): American Society of Anesthesiologists (October 2013): *Don't obtain baseline laboratory studies – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal:* and, the American Academy of Ophthalmology (February 2013): *Preoperative tests are not necessary because eye surgeries are not lengthy and don't pose serious risks. An EKG should be ordered if patients have heart disease. A blood glucose test should be ordered if patients have diabetes. A potassium test should be ordered if patients are on diuretics.*

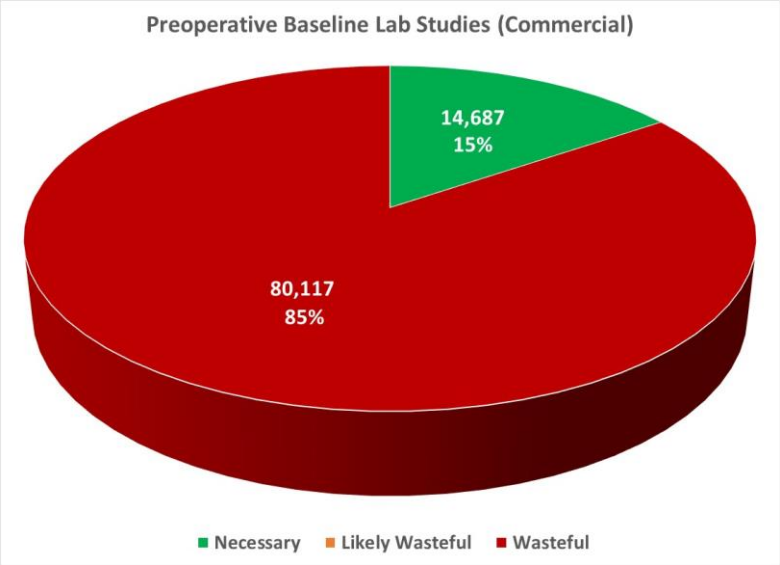
All patients need preoperative *evaluation*, but a low-risk patient having a low-risk procedure does not need pre-op *testing*. Performing routine lab tests in patients who are otherwise healthy is of little value in detecting disease and does not make an important contribution to perioperative assessment and management. Unnecessary lab tests may result in delays in care and add unnecessarily to the cost of the procedure.

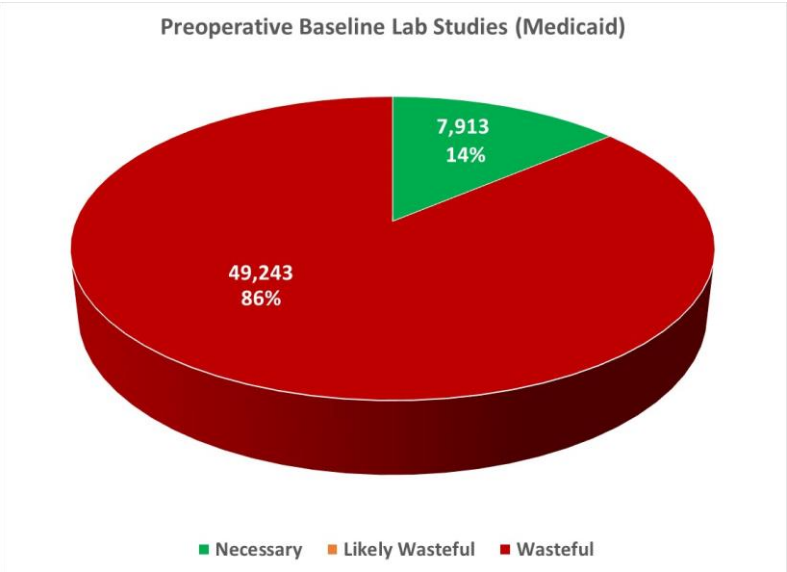
For this measure:

- This measure considers urinalysis for urologic procedures or urinary symptoms or disorders as *Necessary*.
- A number of conditions are excluded, *for example*:
  - The low-risk procedure falls on or one day after an evaluation & management (E&M) visit for emergency care, observation or urgent care
  - Diagnosis of endocrine, liver or renal disorders
  - Diagnosis of coagulation disorders up to two years prior or on anticoagulants in the last three months
  - Electrolyte testing occurs and there is a prescription of medication such as digoxin, diuretics, and angiotensin converting enzyme inhibitors or angiotensin receptor blockers
  - CBC testing in those with a history of anemia or history suggestive of recent blood loss in the last six months.

# Preoperative Baseline Lab Studies Prior to Low-Risk Procedures

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 85% for the commercially insured population and 86% for the Medicaid insured population. **A total of 129,360 wasteful services were delivered, impacting 109,913 individuals at an estimated cost of $74.3 million[8].** This was ranked as the #5 area of waste for both the commercially insured and Medicaid insured populations, based on the number of wasteful services.



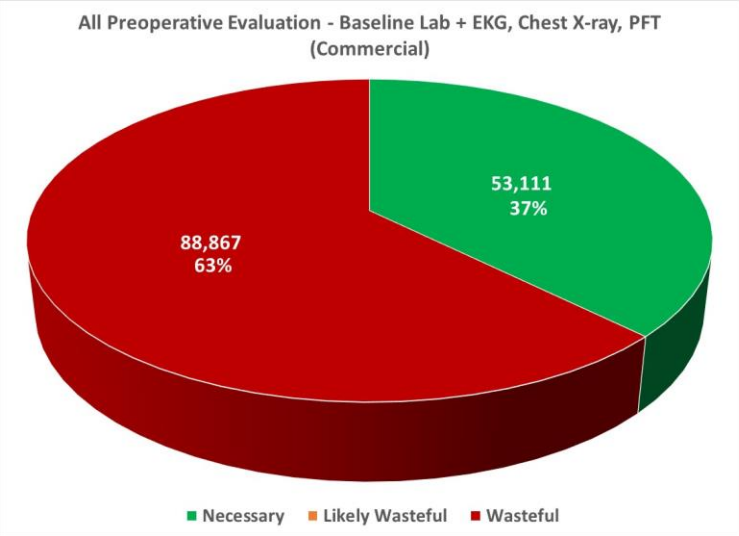

| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Pre-op Baseline Lab Studies | 12,106 | 0 | 69,492 | 6,661 | 0 | 40,421 |

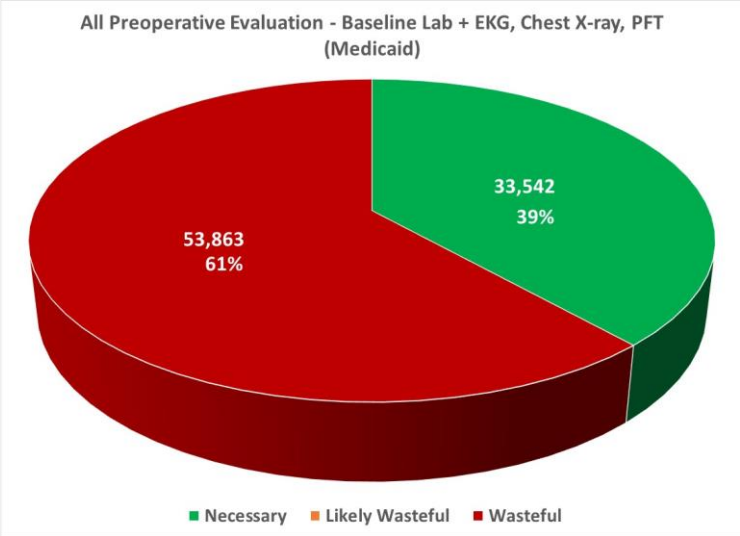
# ALL Pre-op Testing Prior to Low-Risk Procedures

There is a second measure regarding preoperative evaluation in the Health Waste Calculator. The second measure examines pre-op EKGs, chest X-ray and pulmonary function testing in members without significant systemic disease (ASA I or II) performed 30 days or fewer prior to a low-risk procedure. The Waste Index is 19% for the commercially insured population and 15% for the Medicaid insured population. This was ranked as the #13 area of waste for the commercially insured population, based on the number of wasteful services and #15 for the Medicaid insured population.

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful *for both preoperative testing measures combined*.

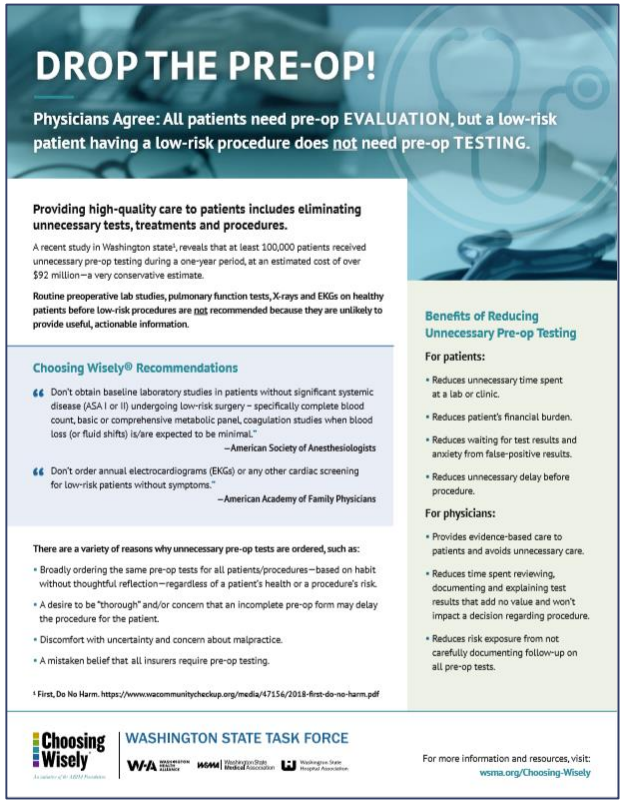
**Combined, a total of 142,730 wasteful services were delivered, impacting 122,257 individuals at an estimated cost of $85.2 million[8].**



# Drop the Pre-op!

Unnecessary pre-op testing was also identified as a top area of waste in our first report, "First, Do No Harm." As a result, the Washington State Choosing Wisely Task Force selected this topic for intervention. A "Drop the Pre-op!" communication campaign was developed by clinician leaders and is co-sponsored by the Washington Health Alliance, the Washington State Medical Association and the Washington State Hospital Association. The campaign is targeted at providers in family and internal medicine, surgical subspecialties, anesthesiology and dental practitioners. The following informational flyer is now being used throughout Washington state to educate providers. You can find this flyer and other related materials here: [www.wsma.org/choosing-wisely](www.wsma.org/choosing-wisely)



DROP THE PRE-OP!

Physicians Agree: All patients need pre-op EVALUATION, but a low-risk patient having a low-risk procedure does not need pre-op TESTING.

**Providing high-quality care to patients includes eliminating unnecessary tests, treatments and procedures.**

A recent study in Washington state[1], reveals that at least 100,000 patients received unnecessary pre-op testing during a one-year period, at an estimated cost of over $92 million—a very conservative estimate.

**Routine preoperative lab studies, pulmonary function tests, X-rays and EKGs on healthy patients before low-risk procedures are not recommended because they are unlikely to provide useful, actionable information.**

**Choosing Wisely® Recommendations**

"Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal."
—American Society of Anesthesiologists

"Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms."
—American Academy of Family Physicians

**There are a variety of reasons why unnecessary pre-op tests are ordered, such as:**

- Broadly ordering the same pre-op tests for all patients/procedures—based on habit without thoughtful reflection—regardless of a patient's health or a procedure's risk.
- A desire to be "thorough" and/or concern that an incomplete pre-op form may delay the procedure for the patient.
- Discomfort with uncertainty and concern about malpractice.
- A mistaken belief that all insurers require pre-op testing.

[1] First, Do No Harm. https://www.wacommunitycheckup.org/media/47156/2018-first-do-no-harm.pdf

**Benefits of Reducing Unnecessary Pre-op Testing**

**For patients:**

- Reduces unnecessary time spent at a lab or clinic.
- Reduces patient's financial burden.
- Reduces waiting for test results and anxiety from false-positive results.
- Reduces unnecessary delay before procedure.

**For physicians:**

- Provides evidence-based care to patients and avoids unnecessary care.
- Reduces time spent reviewing, documenting and explaining test results that add no value and won't impact a decision regarding procedure.
- Reduces risk exposure from not carefully documenting follow-up on all pre-op tests.

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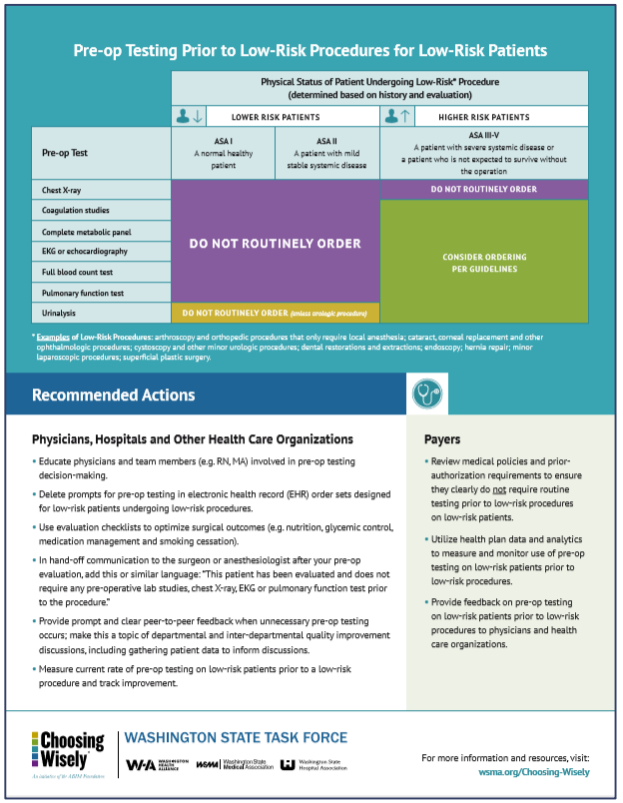
For more information and resources, visit: wsma.org/Choosing-Wisely



**Pre-op Testing Prior to Low-Risk Procedures for Low-Risk Patients**

| | Physical Status of Patient Undergoing Low-Risk* Procedure (determined based on history and evaluation) | | |
|---|---|---|---|
| | LOWER RISK PATIENTS | | HIGHER RISK PATIENTS |
| Pre-op Test | ASA I A normal healthy patient | ASA II A patient with mild stable systemic disease | ASA III-V A patient with severe systemic disease or a patient who is not expected to survive without the operation |
| Chest X-ray | DO NOT ROUTINELY ORDER | | DO NOT ROUTINELY ORDER |
| Coagulation studies | | | |
| Complete metabolic panel | | | CONSIDER ORDERING PER GUIDELINES |
| EKG or echocardiography | | | |
| Full blood count test | | | |
| Pulmonary function test | | | |
| Urinalysis | DO NOT ROUTINELY ORDER (unless urologic procedure) | | |

* Examples of Low-Risk Procedures: arthroscopy and orthopedic procedures that only require local anesthesia; cataract, corneal replacement and other ophthalmologic procedures; cystoscopy and other minor urologic procedures; dental restorations and extractions; endoscopy; hernia repair; minor laparoscopic procedures; superficial plastic surgery.

**Recommended Actions**

**Physicians, Hospitals and Other Health Care Organizations**

- Educate physicians and team members (e.g. RN, MA) involved in pre-op testing decision-making.
- Delete prompts for pre-op testing in electronic health record (EHR) order sets designed for low-risk patients undergoing low-risk procedures.
- Use evaluation checklists to optimize surgical outcomes (e.g. nutrition, glycemic control, medication management and smoking cessation).
- In hand-off communication to the surgeon or anesthesiologist after your pre-op evaluation, add this or similar language: "This patient has been evaluated and does not require any pre-operative lab studies, chest X-ray, EKG or pulmonary function test prior to the procedure."
- Provide prompt and clear peer-to-peer feedback when unnecessary pre-op testing occurs; make this a topic of departmental and inter-departmental quality improvement discussions, including gathering patient data to inform discussions.
- Measure current rate of pre-op testing on low-risk patients prior to a low-risk procedure and track improvement.

**Payers**

- Review medical policies and prior-authorization requirements to ensure they clearly do not require routine testing prior to low-risk procedures on low-risk patients.
- Utilize health plan data and analytics to measure and monitor use of pre-op testing on low-risk patients prior to low-risk procedures.
- Provide feedback on pre-op testing on low-risk patients prior to low-risk procedures to physicians and health care organizations.

Choosing Wisely | WASHINGTON STATE TASK FORCE

For more information and resources, visit: wsma.org/Choosing-Wisely

# #6: Two or More Concurrent Antipsychotic Medications

This measure examines individuals of any age prescribed two or more antipsychotic medications concurrently.

Association with Choosing Wisely (CW): American Psychiatric Association (September 2013): *Don't routinely prescribe two or more antipsychotic medications concurrently.*

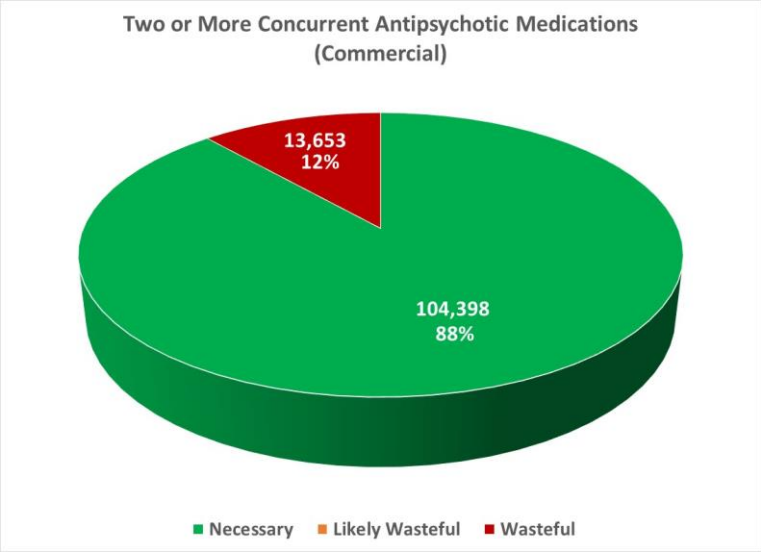
Combination treatment with more than one antipsychotic medication is an increasingly common practice in schizophrenia. However, evidence for the efficacy and safety of using multiple antipsychotic medications at the same time is limited, and antipsychotic polypharmacy is associated with increased side effects, including Parkinsonian side effects, hyperprolactinemia (Prolactin is a hormone that plays a role in breast development during pregnancy), hyper-salivation, sedation, cognitive impairment, diabetes and possibly dyslipidemia (results in a low HDL level). In addition, there is increased risk of drug interactions, non-compliance and medication errors.

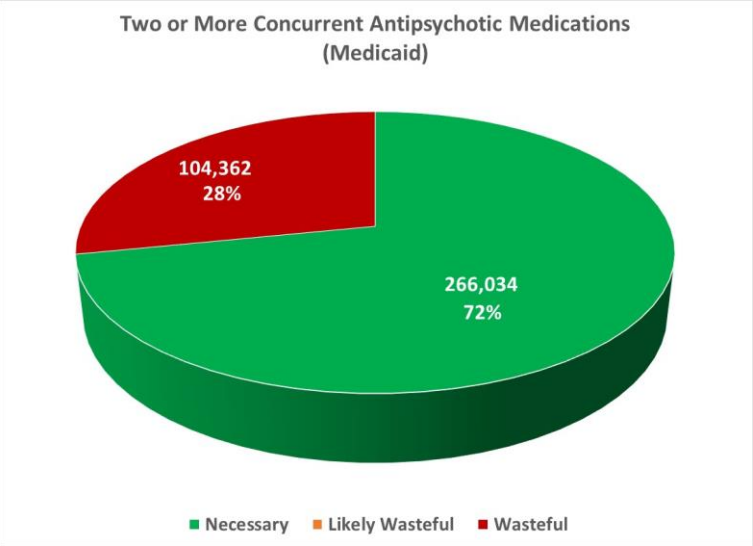
For this measure:

- Members with a prescription of lithium have been excluded from the measure since a combination of lithium and antipsychotics are prescribed concurrently.
- Members with a single prescription of distinct antipsychotic within 60 days will be identified as *Necessary*.

# Two or More Concurrent Antipsychotic Medications

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 12% for the commercially insured population and 28% for the Medicaid insured population. **A total of 118,015 wasteful services were delivered, impacting 16,263 individuals at an estimated cost of $27.3 million**[8,10]. This was ranked as the #2 area of waste for the Medicaid insured population, based on the number of wasteful services (versus #11 for the commercially insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Two or more concurrent antipsychotic medications | 24,524 | 0 | 2,848 | 49,974 | 0 | 13,415 |

# #7: Routine PSA-based Screening for Prostate Cancer

This measure examines prostate specific antigen (PSA)-based screening for prostate cancer in men of any age that occurs within 30 days of an E&M claim.

Association with Choosing Wisely (CW): American Academy of Preventive Medicine (February 2015): *Don't routinely perform PSA-based screening for prostate cancer.*

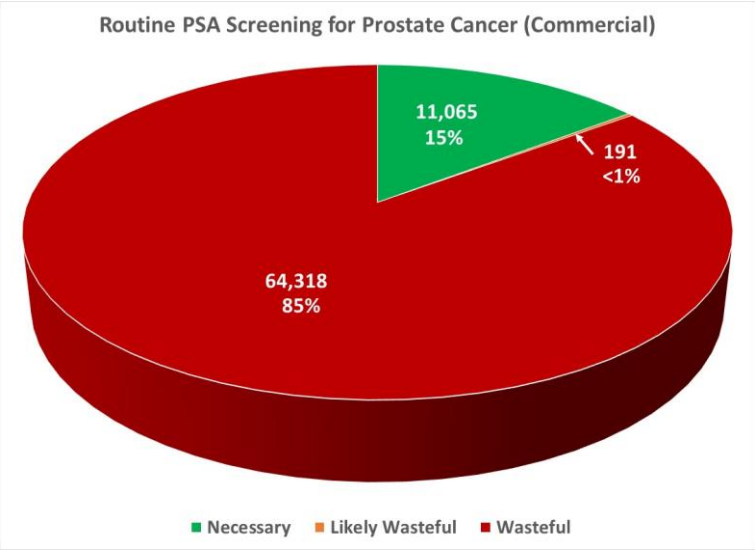
The US Preventive Services Task Force recommends against PSA-based screening for prostate cancer in men of all ages as it leads to substantial over-diagnosis of prostate tumors. More than 1,000 symptom-free men need to be screened for prostate cancer in order to save one additional life. The risks associated with widespread and routine screening of asymptomatic men are believed to outweigh the benefits. There is a high likelihood of having a false positive result leading to worry, decreased quality of life and unnecessary biopsies when many of these elevated PSAs are caused by enlarged prostates and infection, instead of cancer.

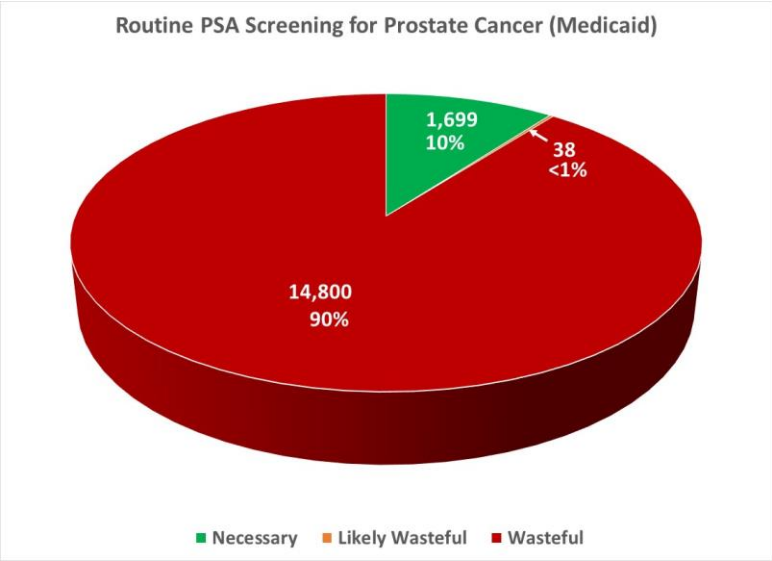
In this measure:

- PSA-screening in men with prostate cancer or risk of recurrence of prostate cancer is considered *Necessary* (Five year look-back period included).
- PSA testing in men who have clinical presentations and risk factors for prostate cancer are considered *Likely Wasteful* as some of the risk factors (such as two or more first-degree relatives with prostate cancer before age 65, black ancestry, etc.) cannot be determined through claims data. Presence of symptoms alone also does not warrant a PSA test since there is no convincing evidence that this is beneficial.

# Routine PSA-based Screening for Prostate Cancer

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 85% for the commercially insured population and 90% for the Medicaid insured population. **A total of 79,347 wasteful services were delivered, impacting 74,391 men at an estimated cost of $8.2 million[8].** This was ranked as the #6 area of waste for the commercially insured population, based on the number of wasteful services (versus #11 for the Medicaid insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| PSA Screening, Prostate Cancer | 7,207 | 185 | 60,272 | 972 | 38 | 13,896 |

# #8: Cervical Cancer Screening for Women

This measure examines cervical cancer screening (Pap smear and HPV test) in women ages 21 years and older who have had adequate prior screening and are not otherwise at high risk for cervical cancer. All women with HIV are excluded from this measure.

This measure is associated with five Choosing Wisely recommendations: American College of Obstetricians and Gynecologists (February 2013); American Academy of Family Physicians (February 2013); American Academy of Family Physicians (April 2012); American Academy of Family Physicians (April 2012); and, American Society for Clinical Pathology (October 2013).

According to national, evidence-based guidelines, *annual* screening should not be done. Women aged 21-29 should be tested with cervical cytology alone (Pap smear) every 3 years. For women ages 30-65, co-testing with cytology and HPV testing should be done every 5 years, or cytology alone every 3 years. In women who have had a total hysterectomy, routine cytology and HPV testing should be discontinued.

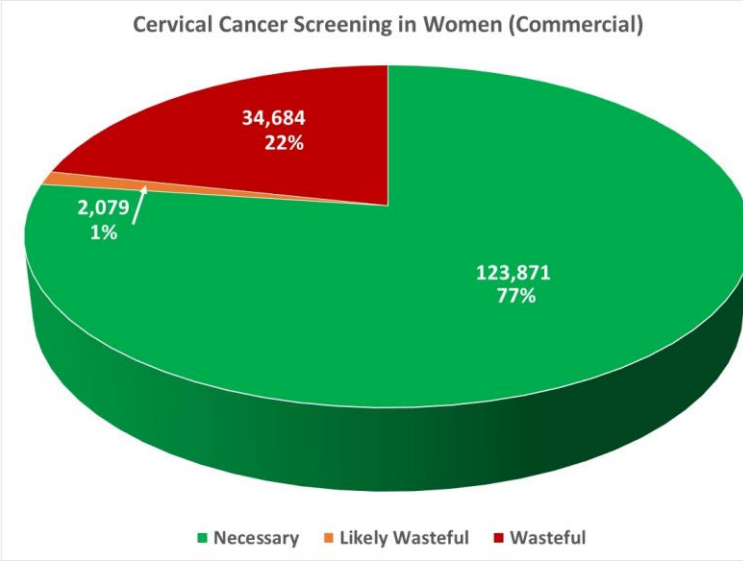
This measure is particularly tricky, because in Washington state, we have both a problem of UNDER screening for some women, and OVER screening for other women. We want to approach a message of "waste" cautiously so as not to undermine efforts in the state to screen all women at *appropriate, evidence-based* intervals.

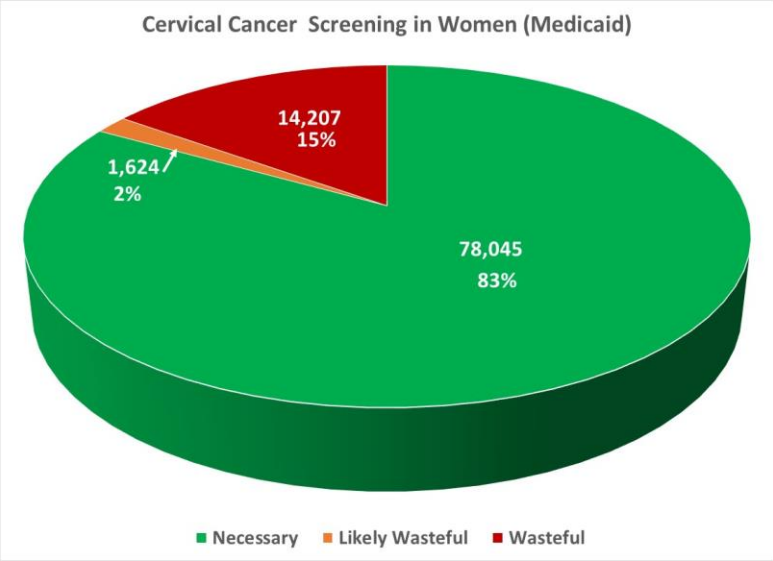
For this measure:

- Cervical cytology screening once in three years for women aged 21-64 with no prior hysterectomy is considered *Necessary*.
- Cervical cytology and HPV screening once in five years for women aged 30-64 with no prior hysterectomy is considered *Necessary*.
- More frequent cervical cancer screening for women aged 21 and older who are at high risk of cervical cancer (high grade precancerous lesion or cervical cancer or women who are immunocompromised) or with abnormal Pap smear is considered *Necessary*.

# Cervical Cancer Screening for Women

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 23% for the commercially insured population and 17% for the Medicaid insured population. **A total of 52,594 wasteful services were delivered, impacting 51,979 women at an estimated cost of $5.3 million[8].** This was ranked as the #7 area of waste for the commercially insured population, based on the number of wasteful services (versus #10 for the Medicaid insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Cervical Cancer Screening | 121,735 | 2,072 | 34,344 | 76,397 | 1,613 | 13,950 |

# #9: Population-based Screening for Vitamin D Deficiency

This measure examines the use of 25-OH-Vitamn D and 1, 25-dihydroxyvitamin D testing for vitamin D deficiency screening in the absence of risk factors.

This measure is associated with two Choosing Wisely recommendations: American Society of Clinical Pathology (February 2013): *Don't perform population-based screening for 25-OH-Vitamin D deficiency*; and Endocrine Society (October 2013): *Don't routinely measure 1, 25-dihydroxyvitamin D unless the patient has hypercalcemia or decreased kidney function.*

There is no evidence demonstrating benefits of screening for Vitamin D deficiency *at a population level*.

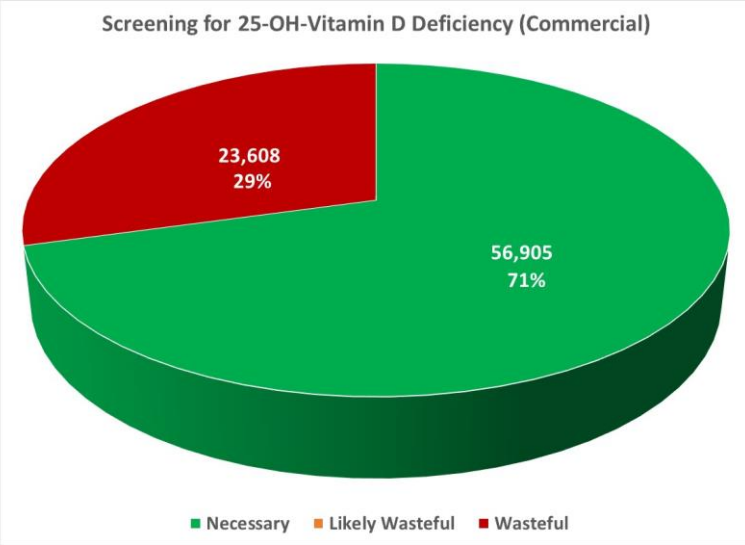
Vitamin D measurement is reasonable in people at high risk for Vitamin D deficiency.

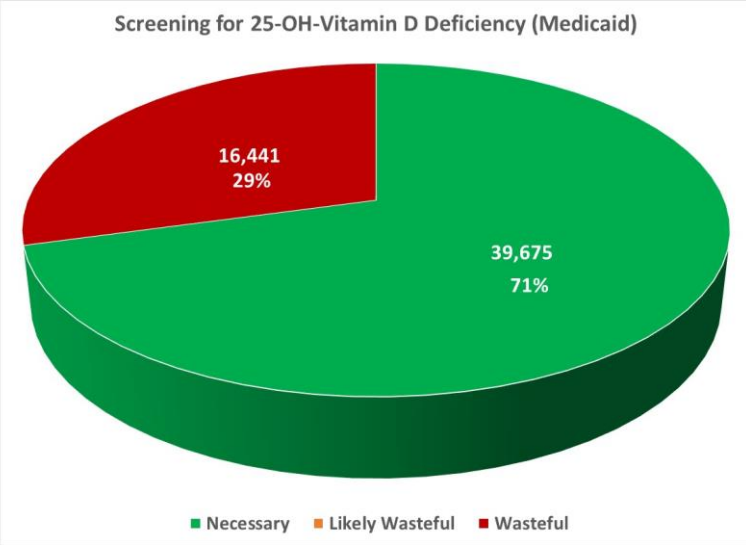
For this measure a number of conditions would constitute screening for Vitamin D deficiency as *Necessary*, for example:

- Vitamin D (25-OH) screening in conjunction with chronic conditions (e.g., rickets, osteoporosis, chronic kidney disease, liver failure, malabsorption syndromes), risk factors for Vitamin D deficiency (e.g., sarcoidosis, TB), high risk medications, pregnancy, obesity, and history of falls and traumatic fractures in older adults, is considered *Necessary*.
- Measurement of 1,25 $(OH)_2$ Vitamin D is considered *Necessary* with acquired and inherited disorders of Vitamin D and phosphate metabolism.

# Population-based Screening for Vitamin D Deficiency

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 29% for both the commercially insured and Medicaid insured populations. **A total of 40,049 wasteful services were delivered, impacting 38,998 individuals at an estimated cost of $7.7 million[8].** This was ranked as the #9 area of waste for both the commercially insured and Medicaid insured populations, based on the number of wasteful services.




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| Population-Based Screening for Vitamin D Deficiency | 47,715 | 0 | 22,941 | 33,079 | 0 | 16,057 |

# #10: Prescribing NSAIDs for Hypertension, Heart Failure or Chronic Kidney Disease

This measure examines prescriptions* for nonsteroidal anti-inflammatory drugs (NSAIDs) in individuals 18 years and older with hypertension or heart failure or chronic kidney disease (CKD) of all causes, including diabetes.

Association with Choosing Wisely (CW): American Society of Nephrology (April 2012): *Avoid nonsteroidal anti-inflammatory drugs (NSAIDs) in individuals with hypertension or heart failure or chronic kidney disease (CKD) of all causes, including diabetes.*

In the US, over-the-counter and prescribed NSAIDs are widely used to provide analgesic (relieve pain) and anti-inflammatory benefits. Examples of commonly known NSAIDs include ibuprofen (Motrin, Advil), Celebrex and aspirin. However, these are associated with adverse effects for some people: the use of NSAIDs can elevate blood pressure, make antihypertensive drugs less effective, cause fluid retention, and worsen kidney function in individuals with hypertension (high blood pressure) or heart failure or CKD. Also, NSAIDs can interact with other prescribed medications that may reduce their effectiveness and increase the risk of renal impairment.

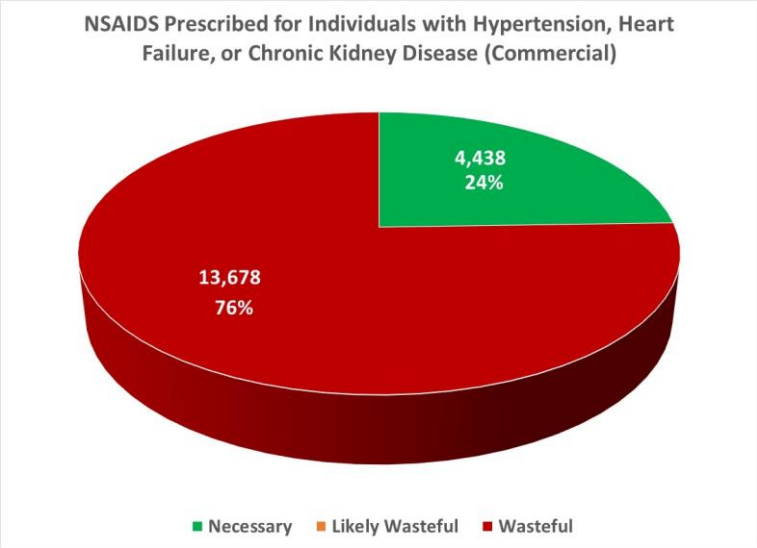
For this measure:

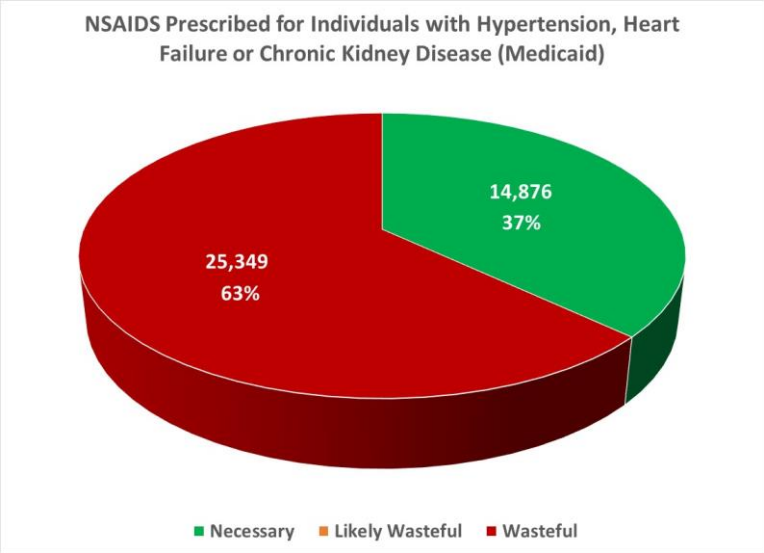
- Low-dose aspirin and topical NSAIDs are considered *Necessary*.

*Note: NSAIDs are commonly purchased over the counter (without a prescription) and are outside traditional data capture through claims. These are not included in this measure.

# Prescribing NSAIDs for Hypertension, Heart Failure or Chronic Kidney Disease

The charts below show the total number of services measured broken down by Necessary, Likely Wasteful and Wasteful. The overall Waste Index is 76% for the commercially insured population and 63% for the Medicaid insured population. **A total of 39,027 wasteful services were delivered, impacting 31,610 individuals at an estimated cost of $500,000**[8,10]. This was ranked as the #8 area of waste for the Medicaid insured population, based on the number of wasteful services (versus #10 for the commercially insured population).




| Measure | COMMERCIAL–MEMBERS IMPACTED | | | MEDICAID–MEMBERS IMPACTED | | |
|---|---|---|---|---|---|---|
| | Necessary | Likely Wasteful | Wasteful | Necessary | Likely Wasteful | Wasteful |
| NSAIDS for Hypertension, Heart Failure or CKD | 3,883 | 0 | 12,057 | 10,173 | 0 | 19,553 |

# Calculating Health Care Waste Over Time

Because some measures in the Health Waste Calculator were modified or added from Version 5 to Version 7, and because we added Medicaid data for this analysis, we re-ran results (using Version 7) for the "top 10" areas of waste noted in this report for the prior measurement year (July 2015 – June 2016). We did this to provide comparable data for the prior period and the current period (July 2016 – June 2017). Results are shown below. The level of waste remained remarkably similar for the two time periods, suggesting a strong practice pattern in these areas of care.

| | Current Period (July 2016 – June 2017) | | | Prior Period (July 2015 – June 2016) | | |
|---|---|---|---|---|---|---|
| | # of Services Examined | # of Wasteful Services | Waste Index | # of Services Examined | # of Wasteful Services | Waste Index |
| Opiates for acute low back pain | 248,790 | 232,824 | 93.6% | 267,494 | 251,528 | 94.0% |
| Antibiotics for URI and ear infection | 197,871 | 197,758 | 99.9% | 202,094 | 202,020 | 99.9% |
| Annual EKG/cardiac screening | 693,071 | 196,123 | 28.3% | 655,440 | 195,160 | 29.8% |
| Imaging tests for eye disease | 199,928 | 137,070 | 68.6% | 190,751 | 136,248 | 71.4% |
| Pre-op lab studies, low-risk procedures | 151,960 | 129,360 | 85.1% | 152,376 | 129,411 | 84.9% |
| Two or more concurrent antipsychotic meds | 488,477 | 118,015 | 24.2% | 447,199 | 108,521 | 24.3% |
| PSA-screening for prostate cancer | 92,111 | 79,347 | 86.1% | 89,299 | 76,702 | 85.9% |
| Cervical cancer screening for women | 254,510 | 52,594 | 20.7% | 252,161 | 58,231 | 23.1% |
| Screening for Vitamin D deficiency | 136,629 | 40,049 | 29.3% | 145,214 | 43,033 | 29.6% |
| NSAIDS for hypertension, heart failure, CKD | 58,341 | 39,027 | 66.9% | 54,766 | 37,641 | 68.7% |


# APPENDICES

# Appendix A: End Notes

**1.** "Report on the Economic Well-Being of U.S. Households in 2017," published May 20, 2018 by the Board of Governors of the Federal Reserve System

**2.** "64% of Patients Avoid Care Due to High Patient Healthcare Costs." Patient Engagement HIT

**3.** Urban Institute, Debt in America: https://apps.urban.org/features/debt-interactive-map/

**4.** Peterson-Kaiser Health System Tracker: https://www.healthsystemtracker.org/chart-collection/much-health-spending-expected-grow/#item-start

**5.** JAMA Forum: End-of-Life Care, Not End-of-Life Spending, July 13, 2018

**6.** CNBC Interview with Mr. Buffett, October 16, 2013

**7.** See Appendix E for a list of organizations participating in the Choosing Wisely Task Force

**8.** The Health Waste Calculator includes two methodologies for counting wasteful costs – Case Rate and Line Itemization. In this report, we have only included estimates associated with the **Case Rate method** to simplify reporting. That said, we have information based on estimated costs using the Line Itemization method and this information may be made available upon request.

The **Case Rate** cost counting methodology counts costs from all claim IDs where at least one line has a Waste Cost Count (WCC) Flag value of 'Yes' in the Health Waste Calculator. [By contrast, the Line Itemization methodology counts costs from only the claim lines where the Waste Cost Count Flag value is Yes and likely underestimates wasteful spending.]

The Calculator offers two ways to count costs for a number of reasons related to the nuance of claims reimbursement:

- As services occur at a mix of settings (inpatient, outpatient, systems and independent clinics, etc.) and under varying contract considerations, assigning claim cost at the line level is challenging. For example if an outpatient service is paid as an APC and only part of it is wasteful, this is difficult to decipher with raw claim data.
- Some claims have inconsistent cost assignment resulting in $0 claim lines. In this case, counting costs from only the claim lines with a WCC Flag value of Yes will grossly underestimate cost and opportunity.
- In some cases, counting only the cost of the service in question will miss harmful associated iatrogenic effects of wasteful care decisions.

It is acknowledged that for some Health Waste Calculator measures, Case Rate methodology may be more appropriate and for others, the Line Itemization methodology.

Please note that regardless of the cost counting methodology used, the initial evaluation and management visit is *never* counted as wasteful and the utilization counts are unaffected.

Due to the reasons above, actual wasteful spend is difficult to pinpoint and will likely range from a Line Itemization amount to a Case Rate amount.

# Appendix A: End Notes

**9.** Mafi JN, Russell K, Bortz B, Dachary M, Hazel W, Fendrick M. "Low-Cost, High-Volume Health Services Contribute the Most to Unnecessary Health Spending." *Health Affairs*, 2017:36:10, p 1701.

**10.** Because state and federal rebates for prescription drugs are available to the state Medicaid program, the estimated cost of waste included in this report is higher than the actual cost to the state for this measure.

**11**. 11% of Commercial members and 26% of Medicaid members who had a wasteful service (Eye Imaging measure) had a diagnosis of diabetes. Of these members with a diagnosis of diabetes:

- 0.2% Commercial members and 0.3% Medicaid members with a diagnosis of diabetes were considered wasteful because they had an ophthalmologist visit but had a diagnosis that was not indicated for the eye imaging.
- 68% Commercial members and 65% Medicaid members with a diagnosis of diabetes were considered wasteful because they did not have an ophthalmologist visit but had a general visit code instead of the ophthalmologist visit.
- 32% Commercial members and 35% Medicaid members with a diagnosis of diabetes were considered wasteful because they had an eye imaging, a diagnosis indicated for the imaging but no visit ophthalmologist or general visit codes.

Rationale: Eye imaging for members with significant eye disease such as neoplasms of eye, choroidal detachment, optic atrophy, glaucoma, diabetes, macular degeneration etc. are considered not wasteful if they had the imaging and a diagnosis where the imaging was indicated along with an ophthalmologist visit code within 10 days on or prior to the imaging.

Members who did not have specific indications and did not have an ophthalmologist visit are considered wasteful. On our analysis, the most common reason for members being considered wasteful was because they did not have an ophthalmologist visit. An ophthalmologist visit is considered important because:

- A diagnosis on the claim for the face-to-face visit is considered more accurate than on the claim for the imaging or other diagnostic procedure because diagnosis coding on imaging/diagnostic testing is grossly inaccurate.
- Secondly, these are specialized additional tests recommended only based on the patient's history and findings on a comprehensive eye exam and these tests would most likely be recommended by an ophthalmologist.

Appendix B
48 Measures: Ranking Based on Total # of Wasteful Services, Overall and By Line of Business

| Measure (Short-hand Name) | Ranking Based on # of Wasteful Services | | |
|---|---|---|---|
| | Overall/Combined | Commercial | Medicaid |
| Opiates prescribed for acute low back pain | 1 | 3 | 1 |
| Antibiotics for URI, ear infections | 2 | 2 | 3 |
| Annual EKGs and cardiac screening | 3 | 1 | 4 |
| Imaging tests for eye disease | 4 | 4 | 6 |
| Preoperative baseline lab studies | 5 | 5 | 5 |
| Two or more concurrent antipsychotic meds | 6 | 11 | 2 |
| PSA screening | 7 | 6 | 11 |
| Cervical cancer screening | 8 | 7 | 10 |
| Vitamin D deficiency screening | 9 | 9 | 9 |
| NSAIDs for hypertension, heart failure, CKD | 10 | 10 | 8 |
| Cough and cold medicines, children <4 yrs. | 11 | 21 | 7 |
| Routine general health checks | 12 | 8 | 13 |
| Imaging for low back pain | 13 | 12 | 12 |
| Preoperative EKG, chest X-ray, PFT | 14 | 13 | 15 |
| Imaging for uncomplicated headache | 15 | 15 | 16 |
| Immunoglobulin G/E testing (allergy) | 16 | 16 | 17 |
| Colorectal cancer screening | 17 | 14 | 18 |
| Pediatric head CT scans | 18 | 19 | 14 |

Appendix B
48 Measures: Ranking Based on Total # of Wasteful Services, Overall and By Line of Business

| Measure (Short-hand Name) | Ranking Based on # of Wasteful Services | | |
|---|---|---|---|
| | Overall/Combined | Commercial | Medicaid |
| Cardiac stress testing | 19 | 17 | 24 |
| Antidepressants monotherapy in bipolar disorder | 20 | 22 | 20 |
| CT scans for abdominal pain in children | 21 | 25 | 19 |
| Imaging for uncomplicated acute rhinosinusitis | 22 | 20 | 23 |
| DEXA screening of osteoporosis | 23 | 18 | 28 |
| Repeat CT for known kidney stones | 24 | 29 | 21 |
| Antibiotics for adenoviral conjunctivitis | 25 | 23 | 22 |
| EEG for headaches | 26 | 27 | 25 |
| Coronary angiography | 27 | 24 | 29 |
| CT scans for dizziness, ER evaluation | 28 | 28 | 27 |
| Peripherally inserted central catheters in stage III-IV CKD patients | 29 | 30 | 26 |
| Imaging of carotid arteries for simple syncope | 30 | 26 | 31 |
| Brain imaging (CT, MRI) for simple syncope | 31 | 31 | 30 |
| Preoperative cardiac echocardiography or stress testing | 32 | 32 | 35 |
| Diagnostic testing for chronic urticaria | 33 | 33 | 32 |

Appendix B
48 Measures: Ranking Based on Total # of Wasteful Services, Overall and By Line of Business

| Measure (Short-hand Name) | Ranking Based on # of Wasteful Services | | |
|---|---|---|---|
| | Overall/Combined | Commercial | Medicaid |
| CT head/brain for sudden onset hearing loss | 34 | 34 | 33 |
| Renal artery revascularization | 35 | 36 | 36 |
| Arthroscopic lavage and debridement for knee osteoarthritis | 36 | 35 | 38 |
| Oral antibiotics for uncomplicated, acute tympanostomy tube otorrhea | 37 | 42 | 34 |
| Multiple palliative radiation treatments in bone metastases | 38 | 38 | 37 |
| Postcoital test for infertility | 39 | 37 | Fewer than 20 |
| Vertebroplasty | 40 | 39 | Fewer than 20 |
| MRI for rheumatoid arthritis | 41 | 40 | Fewer than 20 |
| Coronary artery calcium scoring for known CAD | 42 | 41 | Fewer than 20 |
| Bleeding time testing | 43 | Fewer than 20 | Fewer than 20 |
| Pulmonary function testing prior to cardiac surgery | 44 | Fewer than 20 | Fewer than 20 |
| Voiding cystourethrogram for UTI | Fewer than 20 | Fewer than 20 | Fewer than 20 |
| Sperm function testing | Fewer than 20 | Fewer than 20 | Fewer than 20 |
| Inductions of labor or C-section deliveries | Fewer than 20 | Fewer than 20 | Fewer than 20 |
| Vision therapy for patients w/ dyslexia | Fewer than 20 | Fewer than 20 | Fewer than 20 |

## Appendix C – Top 10 Ranking, based on Estimated Spend

When we rank the 48 measures *based on estimated spend*, the priority order changes somewhat and three different areas of care (highlighted below) make the top 10 list. These 10 areas of care account for 82% of the total estimated spend on wasteful services in this analysis.

| Measure | Estimated Spend | Overall Waste Index* |
|---|---|---|
| Preoperative baseline lab studies | $74.3 million | 85.1% |
| Annual EKGs and cardiac screening | $62.2 million | 28.3% |
| Imaging tests for eye disease | $40.0 million | 68.6% |
| Two or more concurrent antipsychotic meds | $27.3 million | 24.2% |
| Peripherally inserted central catheters (PICC) in stage III-IV CKD patients | $27.3 million | 100% |
| Opiates prescribed for acute low back pain | $13.1 million | 93.6% |
| Preoperative EKG, chest X-ray, PFT | $10.9 million | 17.3% |
| Imaging for uncomplicated headache | $8.9 million | 73.6% |
| PSA screening | $8.2 million | 86.1% |
| Vitamin D deficiency screening | $7.7 million | 29.3% |

(*includes commercial and Medicaid results)

# Appendix D: Health Waste Calculator Measures

| Choosing Wisely Recommendation | Short-hand Name |
|---|---|
| **COMMON TREATMENTS** | |
| 1. Don't order antibiotics for adenoviral conjunctivitis (pink eye) | Antibiotics for adenoviral conjunctivitis |
| 2. Don't prescribe oral antibiotics for uncomplicated acute tympanostomy tube otorrhea. | Oral antibiotics for uncomplicated acute TTO |
| 3. Don't prescribe or recommend cough and cold medicines for respiratory illnesses in children under four years of age. | Cough and cold medicines in children <4 years |
| 4. Don't prescribe oral antibiotics for members with upper URI or ear infection (acute sinusitis, URI, viral respiratory illness or acute otitis externa). | Antibiotics for Acute Upper Respiratory and Ear Infections |
| 5. Don't prescribe opiates in acute disabling low back pain before evaluation and a trial of other alternatives is considered. | Opiates in acute low back pain |
| **DIAGNOSTIC TESTING** | |
| 6. Don't do imaging for low back pain within the first six weeks unless red flags are present. | Lower back pain imaging |
| 7. Don't do imaging for uncomplicated headache. | Headache imaging |
| 8. Don't obtain brain imaging studies (CT or MRI) in the evaluation of simple syncope and a normal neurological examination. | Syncope image |
| 9. Don't perform unproven diagnostic tests, such as immunoglobulin G (IgG) testing or an indiscriminate battery of immunoglobulin E (IgE) tests, in the evaluation of allergy. | Immunoglobulin G / immunoglobulin E testing |
| 10. Don't routinely do diagnostic testing in patients with chronic urticaria. | Diagnostics chronic urticaria |
| 11. Don't perform electroencephalography (EEG) for headaches. | Electroencephalography (EEG) for headaches. |
| 12 Don't perform imaging of the carotid arteries for simple syncope without other neurologic symptoms. | Imaging of the carotid arteries for simple syncope |

# Appendix D: Health Waste Calculator Measures

| Choosing Wisely Recommendation | Short-hand Name |
|---|---|
| **DIAGNOSTIC TESTING (continued)** | |
| 13. Don't order computed tomography (CT) scan of the head/brain for sudden hearing loss. | CT head/brain for sudden hearing loss. |
| 14. Don't routinely obtain radiographic imaging for patients who meet diagnostic criteria for uncomplicated acute rhinosinusitis. | Imaging for uncomplicated acute rhinosinusitis |
| 15. Don't use coronary artery calcium scoring for patients with known coronary artery disease (including stents and bypass grafts). | Coronary artery calcium scoring for known CAD |
| 16. Don't perform routine head CT scans for emergency room visits for severe dizziness. | ED CT scans for dizziness |
| 17. Don't perform advanced sperm function testing, such as sperm penetration or hemizona assays, in the initial evaluation of the infertile couple. | Sperm function testing |
| 18. Don't perform a postcoital test (PCT) for the evaluation of infertility. | Postcoital test for infertility |
| 19. Don't order CT scans of the abdomen and pelvis in young otherwise healthy emergency department patients (age <50) with known histories of kidney stones, or ureterolithiasis, presenting with symptoms consistent with uncomplicated renal colic. | Repeat CT for known kidney stones |
| 20. Don't routinely order imaging tests for patients without symptoms or signs of significant eye disease. | Imaging tests for eye disease |
| 21. Don't perform voiding cystourethrogram (VCUG) routinely in first febrile urinary tract infection (UTI) in children aged 2–24 months | Voiding cystourethrogram for urinary tract infection |
| 22. Don't order computed tomography (CT) head imaging in children 1 month to 17 years of age unless indicated. | Pediatric head Computed Tomography Scans |
| 23. Don't perform stress cardiac imaging or advanced non-invasive imaging in the initial evaluation of patients without cardiac symptoms unless high-risk markers are present. | Cardiac stress testing |
| 24. Don't use bleeding time test to guide patient care. | Bleeding time testing |

# Appendix D: Health Waste Calculator Measures

| Choosing Wisely Recommendation | Short-hand Name |
|---|---|
| **DISEASE APPROACH** | |
| 25. Don't prescribe nonsteroidal anti-inflammatory drugs (NSAIDS) in individuals with hypertension or heart failure or CKD of all causes, including diabetes. | NSAIDs for hypertension, heart failure or CKD |
| 26. Don't schedule elective, non-medically indicated inductions of labor or Cesarean deliveries before 39 weeks, 0 days gestational age. | Inductions of labor or Cesarean deliveries |
| 27. Don't perform an arthroscopic knee surgery for knee osteoarthritis. | Arthroscopic lavage and debridement for knee OA |
| 28. Don't prescribe antidepressants as monotherapy in patients with bipolar I disorder. | Antidepressants monotherapy in bipolar disorder |
| 29. Don't perform computed tomography (CT) scans in the routine evaluation of abdominal pain. | CT scans for abdominal pain in children |
| 30. Don't perform revascularization without prior medical management for renal artery stenosis. | Renal artery revascularization |
| 31. Don't perform vertebroplasty for osteoporotic vertebral fractures. | Vertebroplasty |
| 32. Don't place peripherally inserted central catheters (PICC) in stage III–V CKD patients without consulting nephrology. | PICC stage III–V CKD |
| 33. Don't recommend more than a single fraction of palliative radiation for an uncomplicated painful bone metastasis. | Multiple palliative radiation treatments in bone metastases |
| 34. Don't routinely prescribe two or more antipsychotic medications concurrently. | Two or more antipsychotic medications |
| 35. Don't recommend vision therapy for patients with dyslexia. | Vision therapy for patients with dyslexia |

# Appendix D: Health Waste Calculator Measures

| Choosing Wisely Recommendation | Short-hand Name |
|---|---|
| **PRE-OPERATIVE EVALUATION** | |
| 36. Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery. | Preoperative baseline laboratory studies |
| 37. Don't obtain baseline diagnostic cardiac testing or cardiac stress testing in asymptomatic stable patients with known cardiac disease undergoing low or moderate risk non-cardiac surgery. | Pre-op cardiac echocardiography or stress testing |
| 38. Don't obtain EKG, chest X-rays or Pulmonary function test in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery. | Preoperative EKG, chest X-ray and PFT |
| 39. Don't recommend pulmonary function testing prior to cardiac surgery, in the absence of respiratory symptoms. | PFT prior to cardiac surgery |
| **ROUTINE FOLLOW-UP/MONITORING** | |
| 40. Don't perform MRI of the peripheral joints to routinely monitor inflammatory arthritis. | MRI for rheumatoid arthritis |
| **SCREENING TESTS** | |
| 41. Don't perform PSA-based screening for prostate cancer in all men regardless of age. | PSA screening for prostate cancer |
| 42. Don't order unnecessary screening for colorectal cancer in adults older than age 50 years. | Colorectal cancer screening in adults 50 years and older |
| 43. Don't use dual-energy X-ray absorptiometry (DEXA) screening for osteoporosis in women younger than 65 or men younger than 70 with no risk factors. | DEXA |
| 44. Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms. | Annual resting EKGs |
| 45. Don't perform population based screening for 25-OH-Vitamin D deficiency | Screening for Vitamin D deficiency |

## Appendix D: Health Waste Calculator Measures

| Choosing Wisely Recommendation | Short-hand Name |
|---|---|
| **SCREENING TESTS (continued)** | |
| 46. Don't perform coronary angiography in patients without cardiac symptoms unless high-risk markers present. | Coronary angiography |
| 47. Don't order unnecessary cervical cancer screening (Pap smear and HPV test) in all women who have had adequate prior screening and are not otherwise at high risk for cervical cancer | Cervical cancer screening in women |
| 48. Don’t perform routine general health checks for asymptomatic adults | Routine general health checks |

## Appendix E: Washington State-Based Organizations Participating on the Washington State Choosing Wisely Task Force

CHI Franciscan Health System

Confluence Health

First Choice Health

Fred Hutchinson Cancer Research Center

Kaiser Permanente Washington

MultiCare Health System

Northwest Physicians Network

PeaceHealth Medical Group

Premera Blue Cross

Qualis Health/HealthInsight

Regence Blue Shield

Signal Health

Skagit Regional Health

Swedish Medical Group

The Everett Clinic

Virginia Mason Medical Center

UnitedHealthcare

UW Medicine

Washington Health Alliance

WA State Department of Health

WA State Hospital Association

WA State Medical Association

# About the Milliman MedInsight Health Waste Calculator ™

The Health Waste Calculator (Calculator) is a part of the Milliman MedInsight suite of analytic tools. It is software designed to help identify and quantify overused health care services as defined by national initiatives such as the Choosing Wisely campaign and the U.S. Preventive Services Task Force. The tool contributes significant information to the ongoing dialogue about improving quality of care by identifying specific opportunities to reduce overuse of health care services and potential physical, emotional and financial harm to patients. A number of states, health insurers and provider organizations are now using the Health Waste Calculator.

The underlying algorithms in the Calculator analyze claims data to look at the frequency and cost of common treatment approaches such as prescribing medications, screening, diagnostic testing, and preoperative evaluation known to be overused. The Calculator examines specific areas of care in light of clear recommendations from national medical societies and other nationally vetted sources. Numerous references, studies and global initiatives are evaluated in order to establish the clinical logic in the tool.

The Calculator not only identifies potentially wasteful services but also defines services with a degree of appropriateness for care. Results are put into one of three categories, including:

- **Necessary (not wasteful)**: Indicates the service was clinically appropriate.
- **Likely Wasteful**: Indicates the need to seriously question the appropriateness of the service.
- **Wasteful**: Indicates the service was very likely unnecessary and should not have occurred.

In this analysis, results from the Likely Wasteful and Wasteful categories are combined to report on low-value services.

# About the Washington Health Alliance

The Washington Health Alliance (the 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. It is the combination of using trusted data AND providing a constructive forum for collaboration that makes the Alliance unique.

The Alliance is a nonpartisan 501(c)(3) nonprofit with more than 180 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 and health care quality. (www.wacommunitycheckup.org) The Community Checkup includes results for all measures approved for the Washington State Common Measure Set on Healthcare Quality and Cost.

For more information about the Washington Health Alliance: www.wahealthalliance.org

If you are interested in joining the Alliance, please contact Nancy Giunto, Executive Director: ngiunto@wahealthalliance.org