# Oregon Hospital Payment Report: Radiation and Chemotherapy 2016

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Oregon Health Authority Health Policy & Analytics Division Office of Health Analytics





## Oregon Hospital Payment Report: Outpatient Radiation and Chemotherapy

The Oregon Hospital Payment Report is an annual report that contains median payment information from commercial insurers to hospitals for common inpatient and outpatient procedures. This fulfills the requirement set forth in Oregon Revised Statute (ORS) 442.466. This sub-report of the Oregon Hospital Payment Report contains payment information for radiation and chemotherapy procedures occurring in the outpatient setting. Radiation and chemotherapy are procedures to treat cancer. Payment information for outpatient surgical procedures, inpatient procedures, procedures relating to pregnancy, and diagnostic imaging and testing procedures are found in separate sub-reports.

Due to the U.S. Supreme Court's March 2016 ruling in *Gobeille v. Liberty Mutual Insurance Company*, the Oregon Health Authority may no longer require self-insured Employment Retirement Income Security Act (ERISA) covered health plans to submit claims. It is estimated that Oregon's All Payer All Claims (APAC) database has over 300,000 fewer covered lives reported from the commercial market since the Gobeille decision. As a result, the number of procedures reported has decreased, which in turn affects whether data can be reported.

Highlights of the radiation and chemotherapy sub-report are:

- Most procedures show sizable variations in paid amounts. Variation is seen both within and between hospitals.
- Intensity Modulated Radiation Therapy (IMRT) had the highest median paid amounts in 2016 at \$1700 per session.
- The procedure with the largest increase in median paid amount was radiation treatment guidance procedures, increasing by \$84 from 2015. The procedure also had the largest percent increase in paid amount, increasing 16% from 2015.
- The weighted average change in median paid amounts for radiation and chemotherapy was an increase of \$4. The range of change in median amount paid was -\$23 to +\$84.

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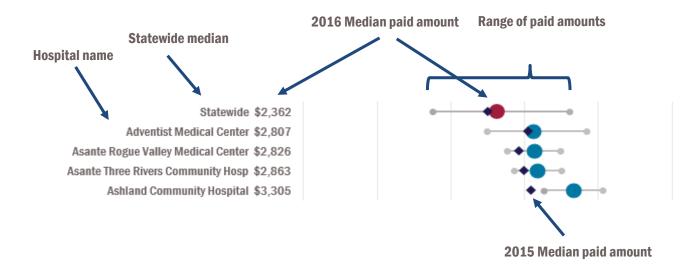
Procedures for 2016 are broken into several smaller reports. This report contains information for outpatient radiation and chemotherapy procedures. Other procedure types may be found in their own sub-report.

#### **Outpatient Radiology and Chemotherapy**

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#### **How To Interpret This Report**

The report presents information on the amount paid for outpatient radiation and chemotherapy at hospitals in Oregon. The data on these paid amounts come from submissions to Oregon's All Payer All Claims database (APAC) from commercial reporting entities. The range of typical paid amounts for each procedure is included at the statewide and hospital levels, and a median amount paid is displayed. The median is the middle value in the range of typical paid amounts.

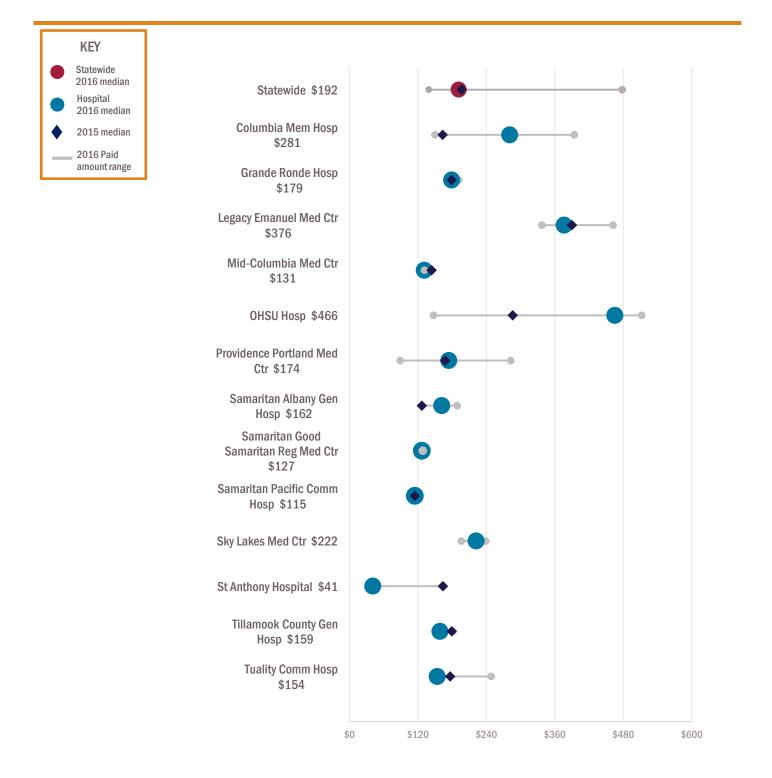


The graphs included in this report contain four main points of information: the hospital name, the 2015 and 2016 median paid amounts, and the range of paid amounts. The **hospital name** is the name of the hospital facility that performed the procedure. Only procedures that were performed at one of Oregon's sixty acute care hospitals are included in this report. The **2016 median paid amount** is reported next to the hospital name, and is also represented on the graph as the large dot. The statewide median paid amount is provided at the top of every graph. The median represents the point that divides the paid amounts in two parts, half above and half below the median amount. This is also known the 50th percentile. The **range of paid amounts** is represented in the charts as the small grey dots and the grey line. This range excludes outliers in the data and is also known as the interquartile range. It is the range between the lower 25th percentile and the upper 75th percentile. By removing the lower 25% of the data, we remove outliers that can skew the median values. This range represents the middle 50% of all paid amounts. The **2015 median paid amount** is shown for reference as the dark diamond. Hospitals that do not have a 2015 median paid amount mean that procedures in that year did not qualify for reporting based on established methodology.

The median amount (large dot in the charts) is not necessarily the center point of the interquartile range (grey line and dots). This is because paid amounts are not evenly distributed across the range. It is common to see paid amounts clustered around certain dollar amounts resulting in the median being pulled off center. The variance in the paid amounts within a hospital come from the different co-payment and deductible amounts paid by patients, as well as different levels of severity in the patient's condition. The differences in paid amount between hospitals include the above reasons, as well as each hospital's negotiated payment rate with commercial insurance companies.

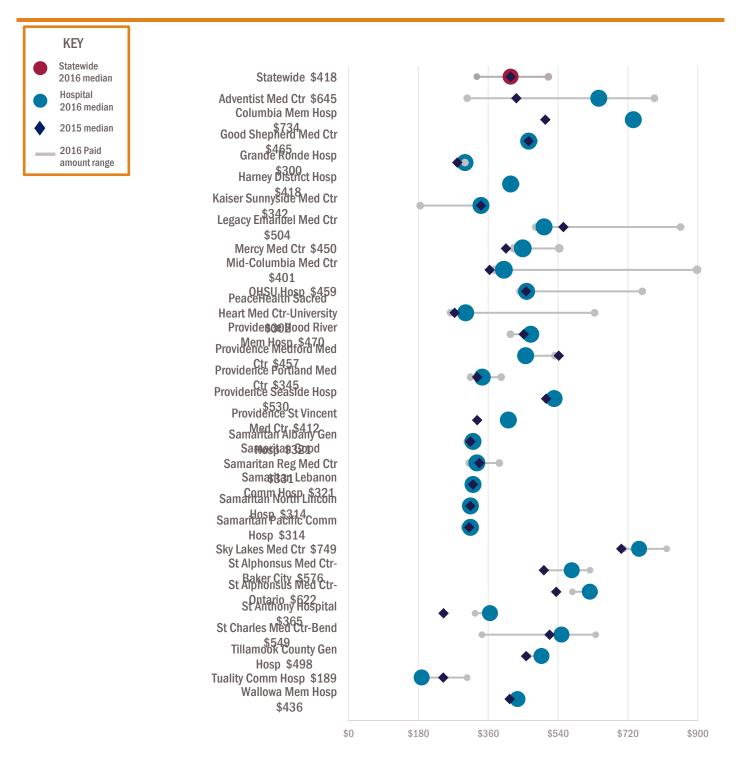
#### **Chemotherapy Injection**

A chemotherapy injection is a method of delivering cancer treating drugs through a series of injections. It is an alternative method to IV delivered therapy and used when a slower introduction of the drugs is desired. Amounts paid are per injection and do not include the price of the drug being used.



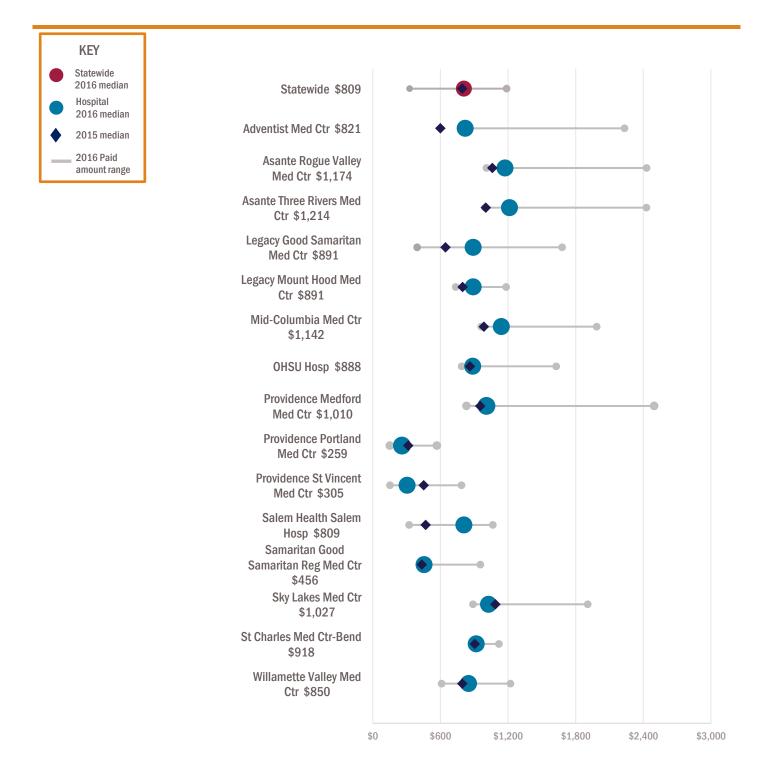
#### **Chemotherapy Infusion**

Chemotherapy infusion is the delivery of cancer treatment drugs through use of intravenous therapy (IV). Drugs are delivered through an IV directly into the bloodstream. Amounts paid are per each one hour session of drug delivery.



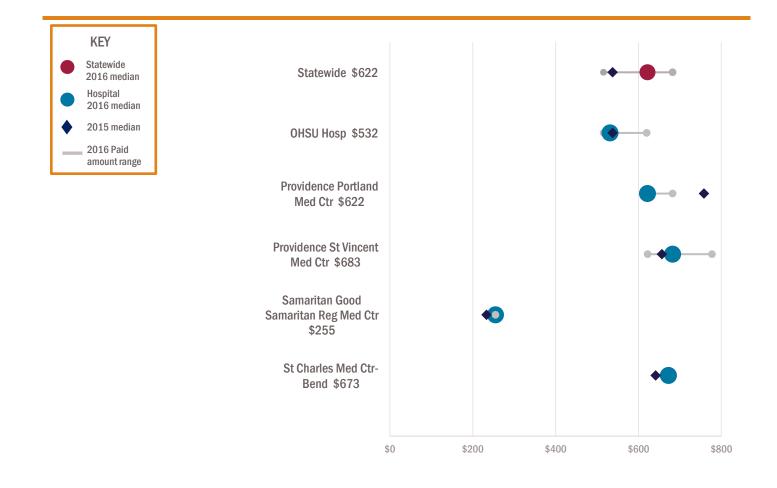
#### **Radiation Treatment: Devices**

Treatment devices are special materials used to alter the radiation beam entering the body. Two devices are blocks and bolus. Blocks are metal alloys either shielding or redirecting the radiation beam in a certain direction. A bolus is special absorbent material weakening the radiation beam and allowing for a more shallow delivery of the radiation. Masks and molds may be used to help immobilize the patient to ensure accurate delivery of the radiation. These treatment devices must be custom made for the patient.



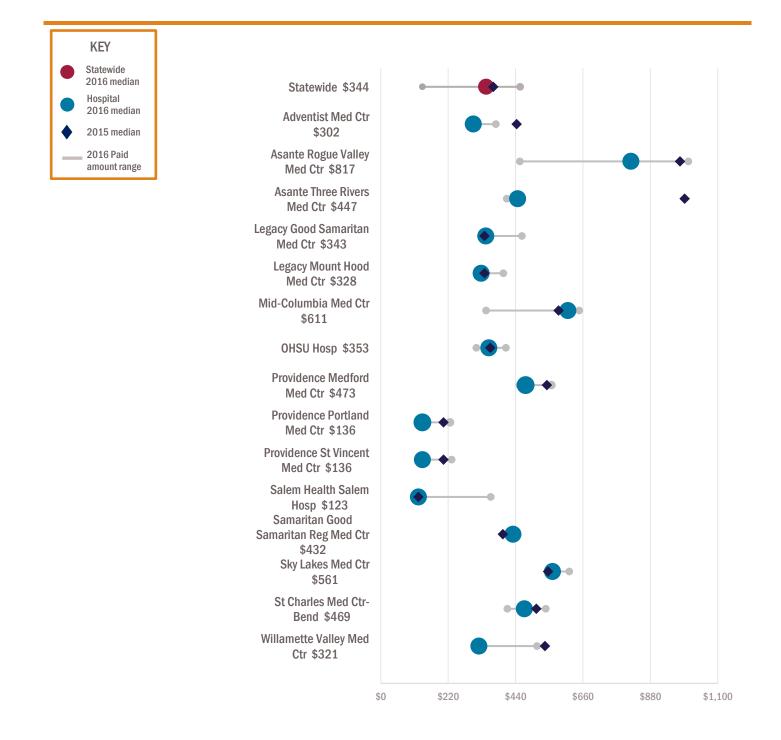
#### **Radiation Therapy: Guidance**

Radiation therapy guidance is the process of marking the target area on the body. The procedure is performed by tattooing very small dots around the area to be targeted, in coordination with other imaging and consultation in preparation of an ongoing radiation therapy delivery. Guidance is part of the overall preparation process called simulation.



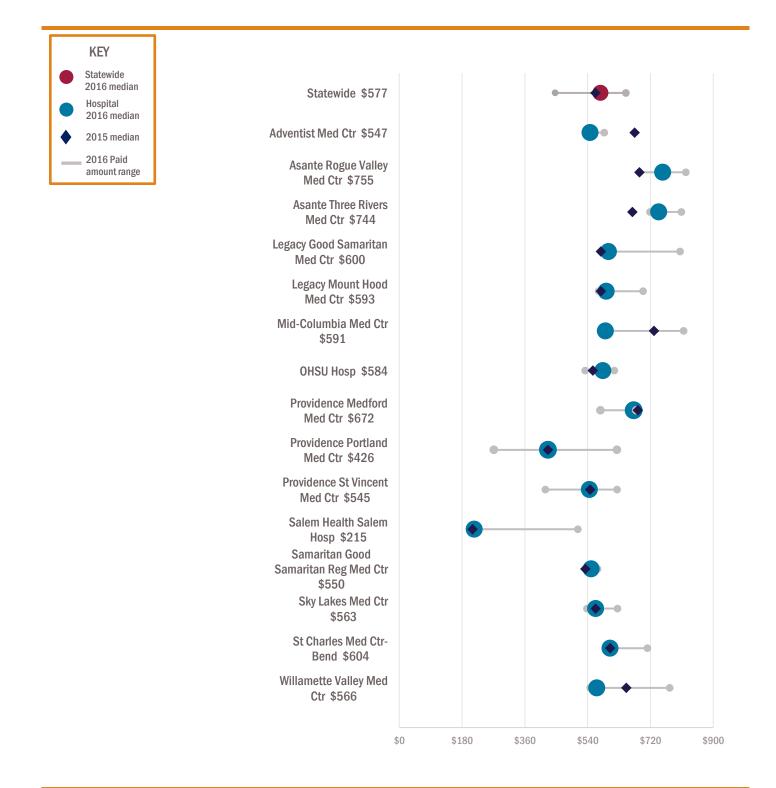
#### **Radiation Treatment: Consultation**

Radiation therapy consultation is the ongoing evaluation of a patient's treatment and progress by a radiation therapy oncologist. This doctor oversees the treatment plan, reviews progress, and makes necessary alterations to the treatment plan.



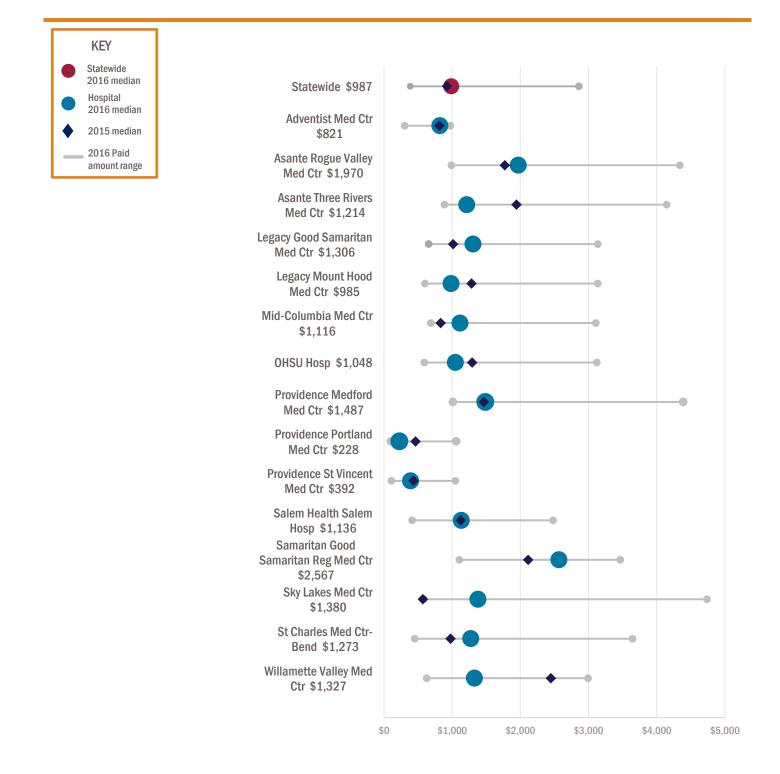
#### **Radiation Therapy: Delivery**

Radiation therapy is the treatment of cancer using focused radiation beams targeting tumors and cancer cells. Radiation therapy is a very complex procedure containing multiple components split out in this report. Radiation therapy delivery is the paid amount to administer a single session of radiation beam therapy. Treatment courses will involve multiple sessions, depending on the severity of the cancer.



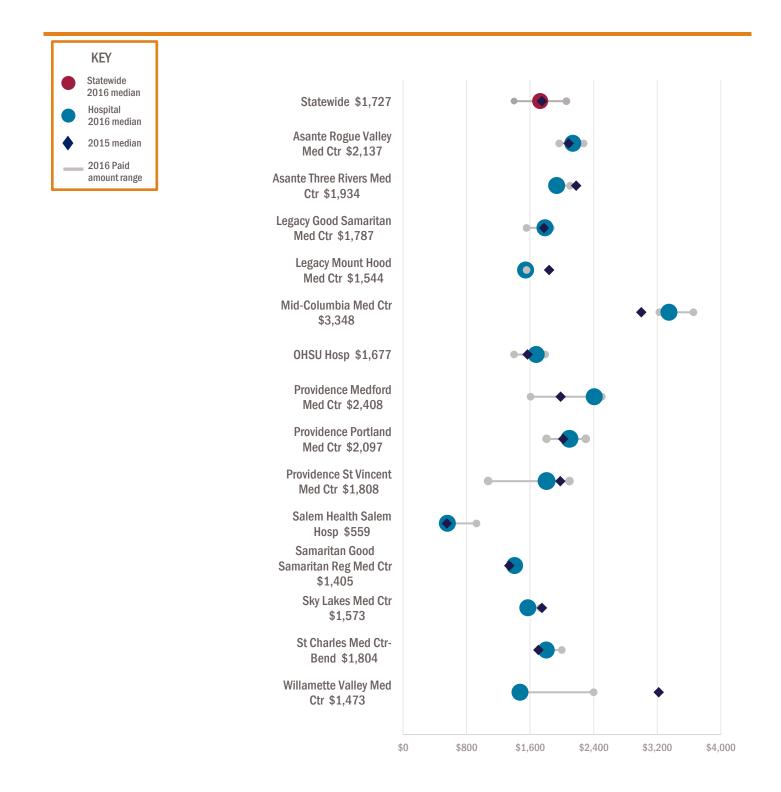
#### **Radiation Therapy: Dosimetry**

Radiation therapy dosimetry is the process of determining the proper dose of radiation to use over the course of the treatment plan. Dose determination is performed during the preparation phase of radiation therapy, often referred to as simulation.



#### **Radiation Therapy: Intensity Modulated Therapy**

Intensity Modulated Radiation Therapy (IMRT) is a newer and more advance method of radiation therapy. It is used in complex cases where tumors are in abnormal shapes or have wrapped around other body structures.



### **Radiation Therapy: Simulation Imaging**

Radiation therapy simulation is the process of preparing to delivery radiation treatments. Additional components of simulation include guidance, dosimetry, and device creation. Amounts shown below cover the CT scans and other imaging done to prepare for treatment and evaluate ongoing treatment.

