

Oregon Hospital Payment Report: Radiation and Chemotherapy 2017

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



Executive Summary

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 2017 at \$1,785 per session.
- IMRT also had the largest increase in median paid amount, increasing by \$58 from 2016.
- Chemotherapy injection had the largest percentage increase, increasing by 15% from 2016.
- The weighted average change in median paid amounts for radiation and chemotherapy was an increase of \$17. The range of change in median amount paid was -\$62 to \$58.

Table of Contents

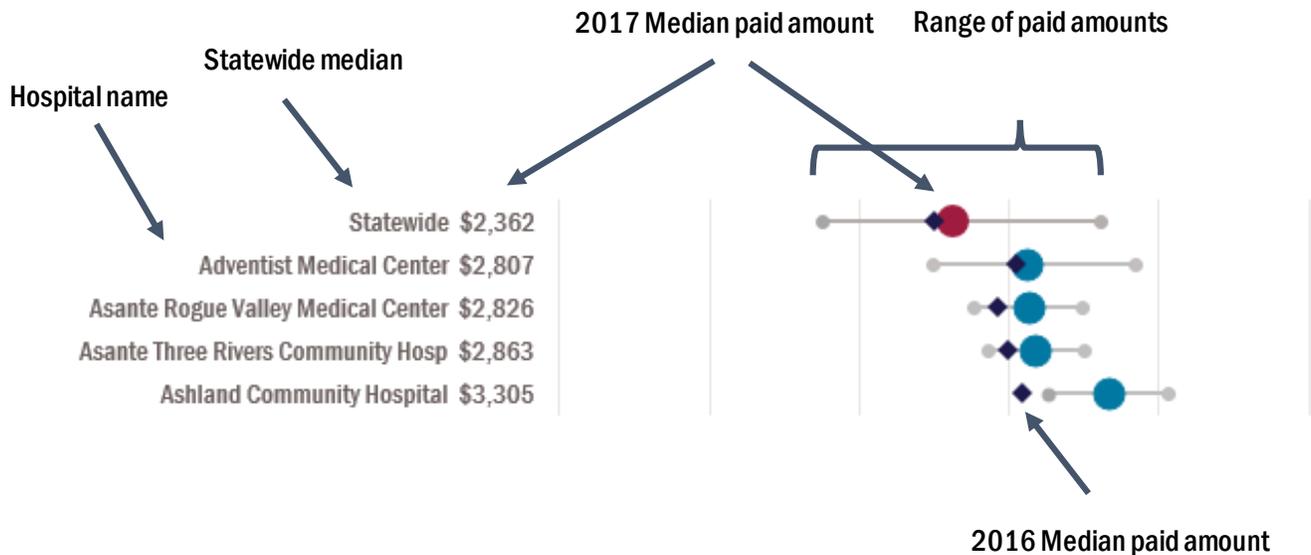
Procedures for 2017 are broken into several smaller reports. This report contains information for outpatient radiation and chemotherapy procedures. Other procedure types may be found in their own sub-report.

Outpatient Radiology & Chemotherapy

How to interpret this report	4
Chemotherapy: Injection	5
Chemotherapy: Infusion	6
Chemotherapy: Infusion Cont	7
Radiation: Devices	8
Radiation: Guidance	9
Radiation: Consultation	10
Radiation: Delivery	11
Radiation: Dosimetry	12
Radiation: IMRT	13
Radiation: Simulation	14

How to Interpret This Report

This report presents information on the amount paid for procedures related to outpatient radiation and chemotherapy at hospitals in Oregon. The data on these paid amounts come from submissions made 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 also 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 2016 and 2017 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 2017 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 amounts 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 as the 50th percentile. The range of paid amounts is represented in the charts as the small gray dots and the gray 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 and upper 25% of the data, we remove outliers that can skew the median values. This range represents the middle 50% of all paid amounts. The 2016 median paid amount is shown for reference as the dark diamond. Hospitals that do not have a 2016 median paid amount mean that procedures in that year did not qualify for reporting based on established methodology.

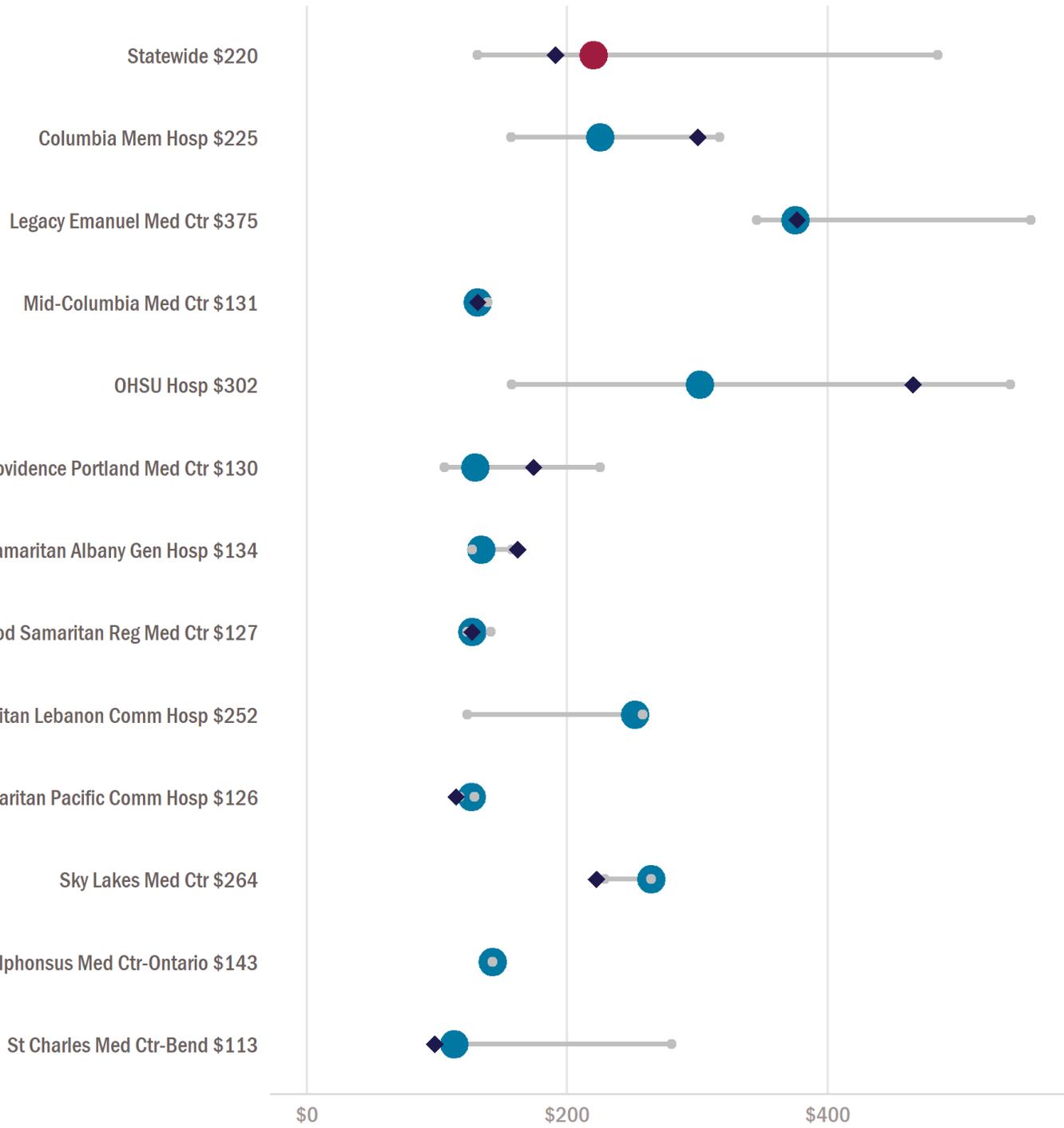
The median amount (large dot in the charts) is not necessarily the center point of the interquartile range (gray line and dots). This is because paid amounts are not evenly distributed across the range. It is common to see paid amounts clustered around certain dollar amounts resulting in the median being 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.

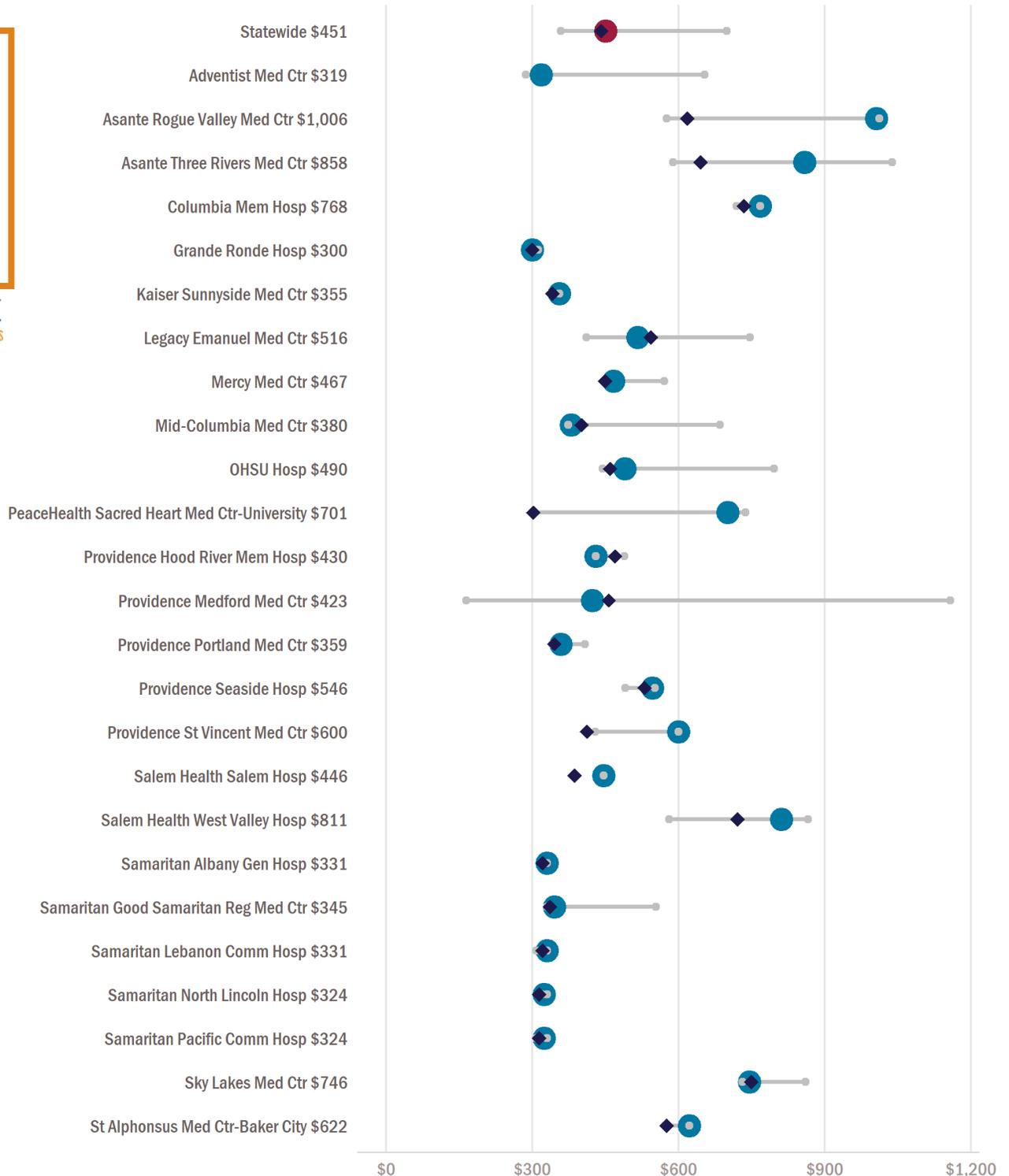
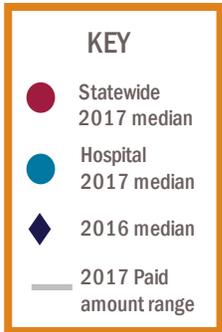
KEY

- Statewide 2017 median
- Hospital 2017 median
- ◆ 2016 median
- 2017 Paid amount range



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.

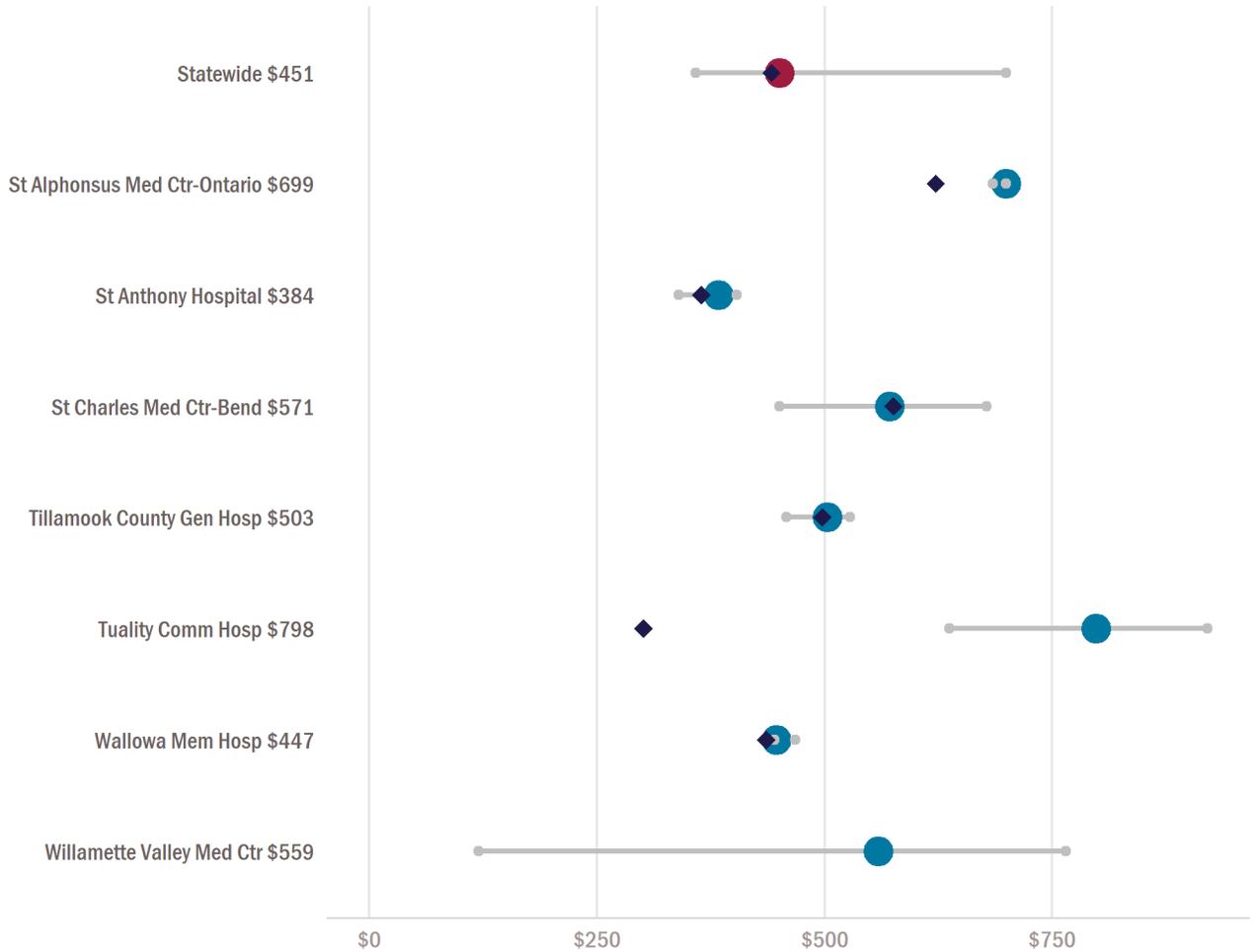


Chemotherapy: Infusion Continued

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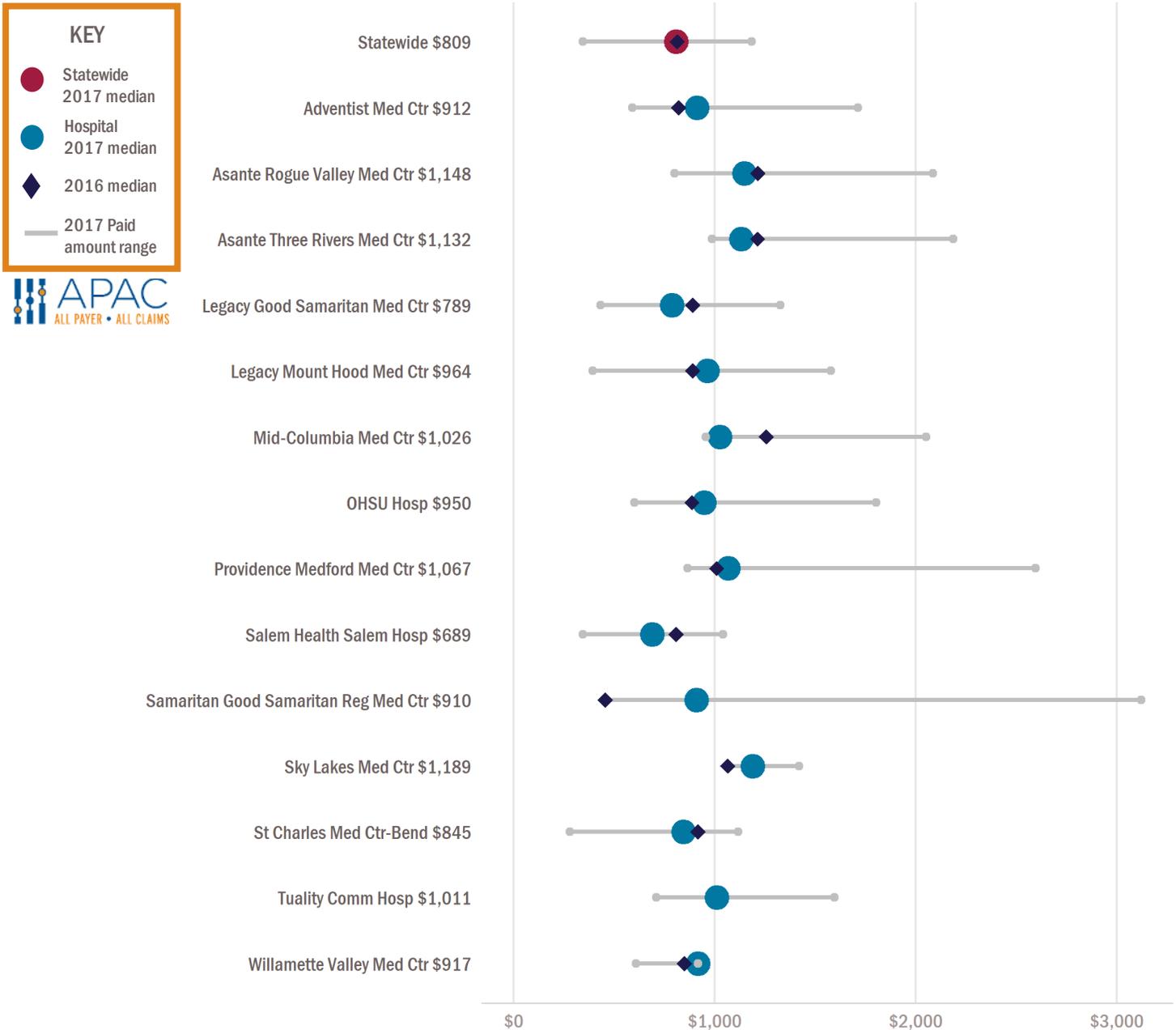
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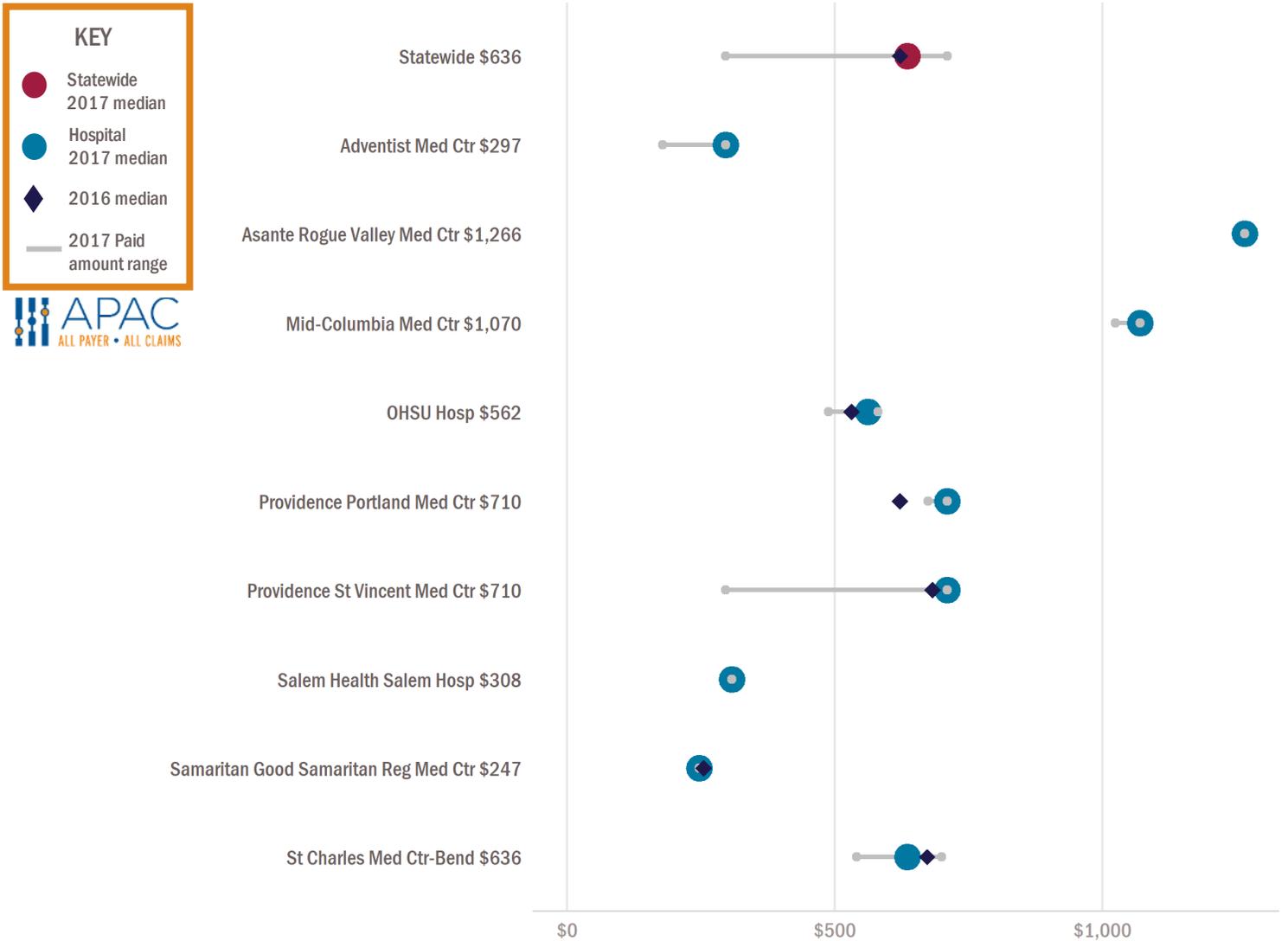
Radiation Treatment: Devices

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.



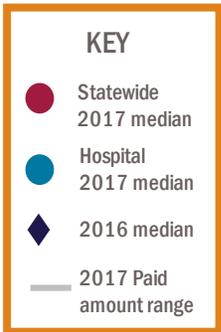
Radiation Therapy: Guidance

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 Therapy: 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 alteration to the treatment plan.



Radiation Treatment: 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.

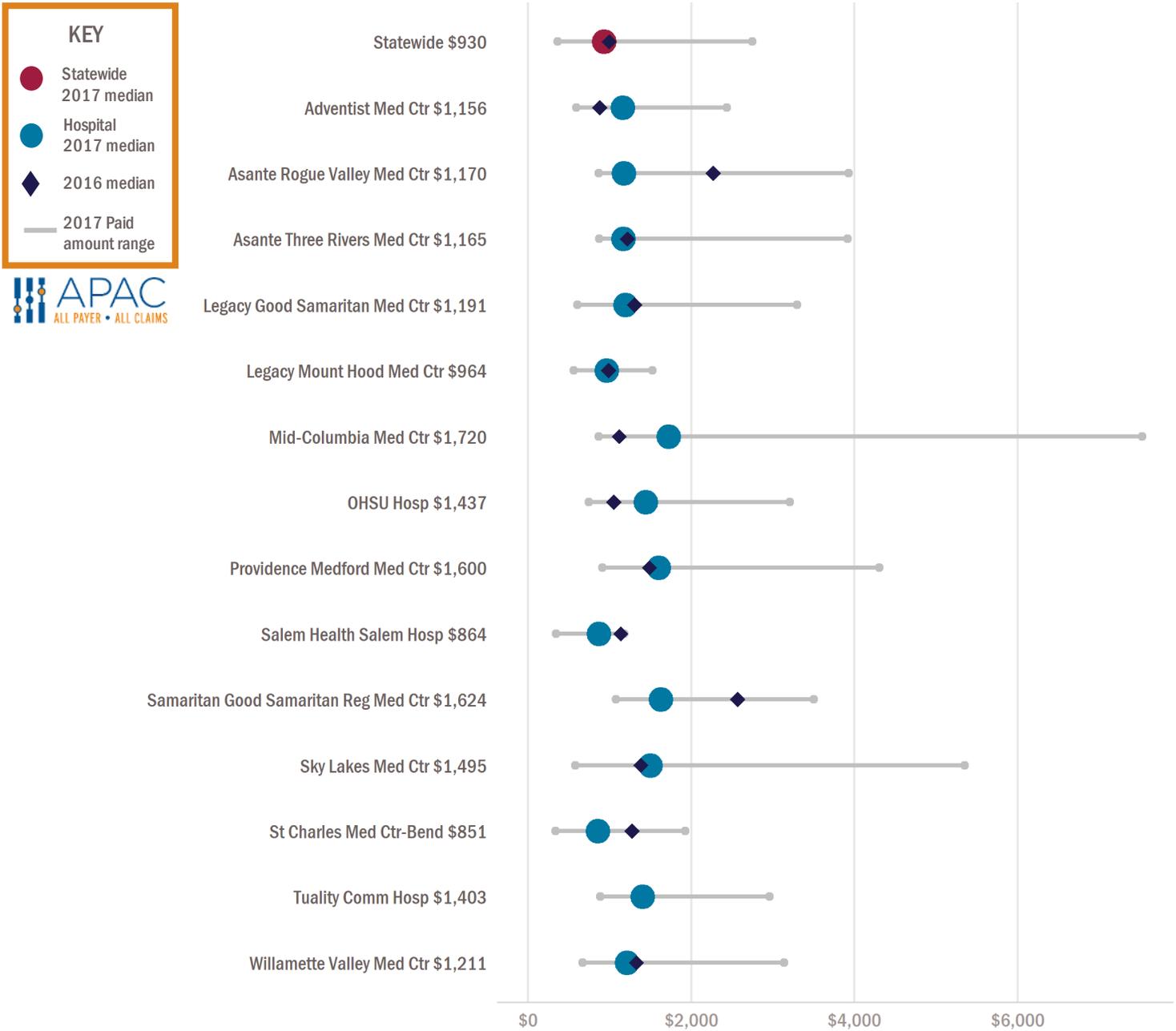
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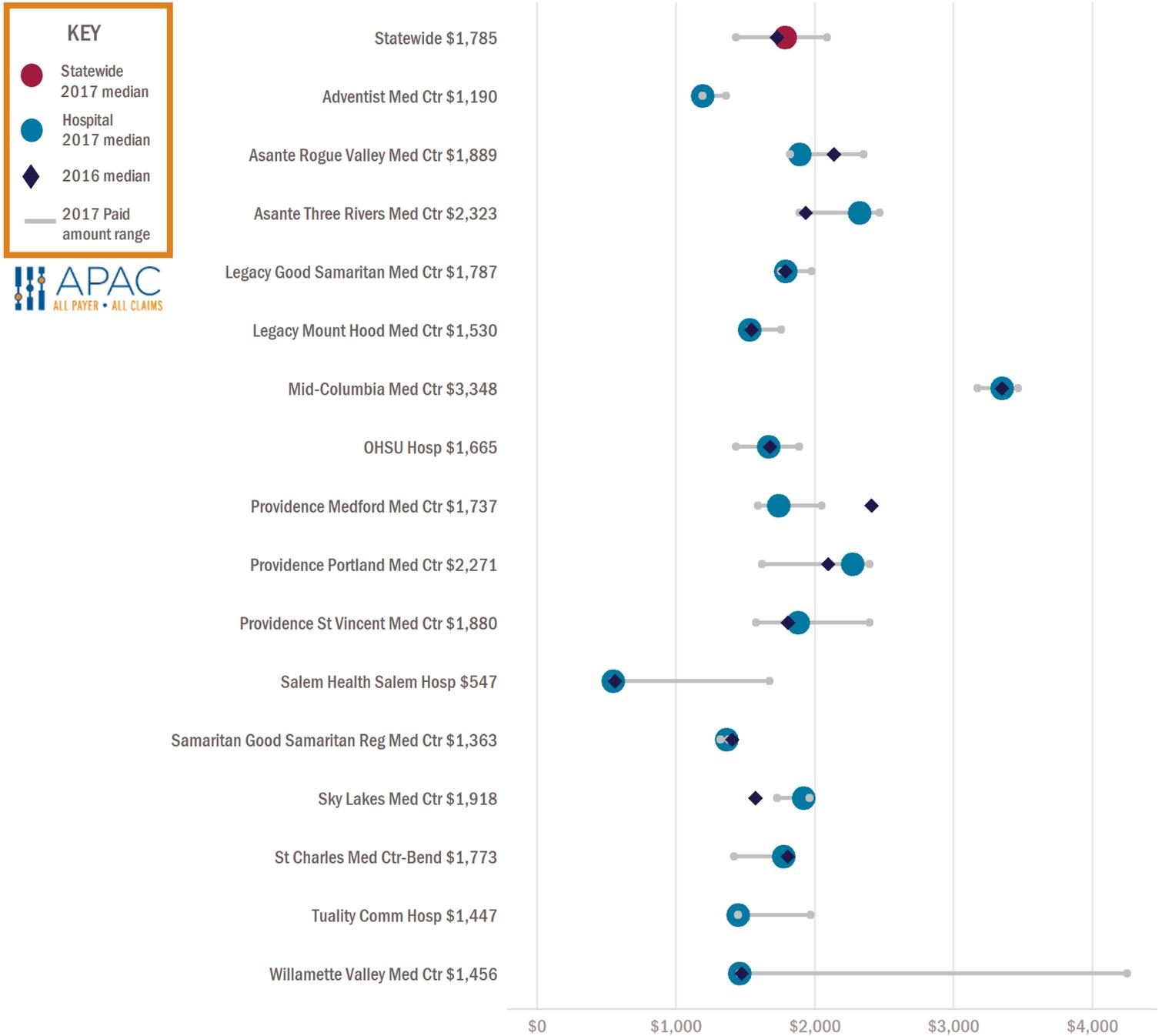
Radiation Therapy: Dosimetry

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 advanced method of radiation therapy. It is used in a 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 deliver 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.

