Oregon Hospital Payment Report: Radiation and Chemotherapy 2015

July 1, 2017

Oregon Health Authority
Division of Health Policy & Analytics
Office of Health Analytics
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 report is mandated by 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.

Radiation therapy began to be reported in a different manner in 2015, due to the complexity and variations in these procedures. They are no longer reported as a rolled-up event, but rather reported on a "per delivery" basis. The multiple subcomponents of radiation therapy treatment courses are reported separately.

Highlights of the radiation and chemotherapy sub-report are:

- Most procedures vary substantially in paid amounts, both within and among hospitals.

- Intensity Modulated Radiation Therapy (IMRT) had the highest median paid amounts in 2015 at $1,700 per session.

- The procedure with the largest increase in median paid amount was radiation treatment guidance procedures, increasing by $240 from 2014. The procedure also had the largest percent increase in paid amount, increasing 81% from 2014.

- Median paid amounts for radiation and chemotherapy were flat overall. The range of change in median amount paid was -$35 to +$240.
Table of contents

Procedures for 2015 are broken into several smaller reports. This report contains information for outpatient radiation and chemotherapy procedures. Other procedure types may be found in separate sub-reports.

Outpatient radiology and chemotherapy

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

The report presents information on the amount paid for radiation and chemotherapy at hospitals in Oregon. The data on these paid amounts come from submissions to the 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 amount.

The graphs included in this report contain four main points of information: the hospital name, the 2014 and 2015 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 60 acute care hospitals are included in this report. The 2015 median paid amount is reported next to the number of procedures in the label, 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 and the 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 2014 median paid amount is shown for reference as the dark diamond. Hospitals that do not have a 2014 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 is the delivery of cancer treatment drug 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 and do not include the price of the drug being used.
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: Intensity modulated therapy

Intensity Modulated Radiation Therapy (IMRT) is a newer and more advanced method of radiation therapy. It is used in complex cases where tumors are in abnormal shapes or have wrapped around other body structures. IMRT treatments have only recently been approved for payments by most insurance companies in Oregon do not have comparison amounts for 2014.
Radiation therapy: 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 insure accurate delivery of the radiation. These treatment devices must be custom made for the patient.
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.

**KEY**
- Statewide 2015 median
- Hospital 2015 median
- 2014 median
- 2015 paid amount range

**Oregon Hospital Payment Report 2015**
Radiation therapy consultation is the ongoing evaluation of your treatment and progress by a radiation therapy oncologist. This doctor oversees the treatment plan, reviews progress and makes necessary alterations to the treatment plan.

**KEY**
- Red: Statewide 2015 median
- Green: Hospital 2015 median
- Blue: 2014 median
- Grey: 2015 paid amount range

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>2015 Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>$375</td>
</tr>
<tr>
<td>Adventist Medical Center</td>
<td>$443</td>
</tr>
<tr>
<td>Asante Rogue Valley Medical Center</td>
<td>$977</td>
</tr>
<tr>
<td>Asante Three Rivers Community Hospital</td>
<td>$992</td>
</tr>
<tr>
<td>Bay Area Hospital</td>
<td>$489</td>
</tr>
<tr>
<td>Good Samaritan Regional Med Ctr</td>
<td>$399</td>
</tr>
<tr>
<td>Legacy Good Samaritan Hospital</td>
<td>$338</td>
</tr>
<tr>
<td>Legacy Mount Hood Medical Center</td>
<td>$338</td>
</tr>
<tr>
<td>Mid-Columbia Medical Center</td>
<td>$581</td>
</tr>
<tr>
<td>OHSU Hospital</td>
<td>$357</td>
</tr>
<tr>
<td>Providence Medford Med Ctr</td>
<td>$542</td>
</tr>
<tr>
<td>Providence Portland Med Ctr</td>
<td>$205</td>
</tr>
<tr>
<td>Providence St. Vincent Med Ctr</td>
<td>$205</td>
</tr>
<tr>
<td>Salem Hospital</td>
<td>$375</td>
</tr>
<tr>
<td>Sky Lakes Medical Center</td>
<td>$546</td>
</tr>
<tr>
<td>St. Charles Med Ctr - Bend</td>
<td>$508</td>
</tr>
<tr>
<td>Willamette Valley Medical Center</td>
<td>$536</td>
</tr>
</tbody>
</table>
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 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.

**KEY**
- Statewide 2015 median
- Hospital 2015 median
- 2014 median
- 2015 paid amount range

- Statewide $416
- Adventist Medical Center $405
- Asante Rogue Valley Medical Center $558
- Asante Three Rivers Community Hosp $454
- Bay Area Hospital $429
- Good Samaritan Regional Med Ctr $375
- Legacy Good Samaritan Hospital $464
- Legacy Mount Hood Medical Center $442
- Mid-Columbia Medical Center $826
- OHSU Hospital $832
- Providence Medford Med Ctr $222
- Providence Portland Med Ctr $264
- Providence St. Vincent Med Ctr $388
- Salem Hospital $342
- Sky Lakes Medical Center $554
- St. Charles Med Ctr - Bend $475
- Willamette Valley Medical Center $353