The Medicare Hospital Outpatient Prospective Payment System (HOPPS): Background Information

**HOPPS Origins**

- Hospital outpatient departments were one of the last areas to be converted from cost based reimbursement to prospectively set payment rates.
- CMS first started to pay hospitals based on APCs (Ambulatory Payment Classifications) on August 1, 2000.

**Terminology**

- “Cost” is a CMS defined concept, not the actual cost to hospitals of procedures
- “Charges” refer to hospital charge master charges that are recorded on claims
- “CCR” (“cost to charge ratio”) is a calculation based on Medicare hospital cost reports at the hospital and department level
- “Status Indicator” (SI): assigned by CMS to HCPCS codes to indicate payment status
- “Bypass List”: codes that are paid but pulled out of the claim for separate rate-setting regardless of what other procedures are on the claim
- “Packaging”: HCPCS codes with SI=N do not have separate payment rates, but are “packaged/bundled” into other paid procedure codes
- “Bundling”: multiple, significant procedures related to an outpatient encounter or episode of care is bundled and paid a single unit of payment.
- “Date offset”: hospital outpatient claims include services delivered on different date; no date of service is on the claim, but the date offset is used to separate services delivered on the same date

**Packaging and Bundling**

- CMS moved forward to package and bundle these five categories of radiology services: imaging guidance services, image processing services, imaging supervision and interpretation services, diagnostic radiopharmaceuticals and contrast media, and radiation oncology services.
- Packaging refers to as being payment for minor, ancillary services associated with a significant procedure are packaged with the primary procedure and paid a single APC amount. (SI=N).
• Bundling refers to multiple, significant procedures related to an outpatient encounter or episode of care is bundled and paid a single unit of payment. An example of this would be composite ambulatory payment classification (APC). (SI=N).

• The packaging approach will not change the mechanism of how hospitals bill and code for their services. The hospital and physicians will continue to code for the procedures and radiopharmaceuticals in the same manner as they always have.

• The changes have occurred on CMS’ claims processing end in which they will bundle the procedure and radiopharmaceutical, and pay on one consolidated payment rather than two separate line items back to the hospital. The physician payment process continues to be the same where each item is paid separately.

• Moreover, the packaging approach that CMS finalized for the CY 2008 allows the use of more claims data by enabling them to treat claims with multiple procedure codes as single claims. This means that CMS will package many services that are primarily billed together on the same claim for the same episode of care.

### Conditional Packaging and Q Status Methodology

• A code may be conditionally packaged if it is used in a composite APC: it is packaged if it occurs on a claim with other codes according to rule defined for the composite APC, and otherwise it is paid separately according to the APC to which it assigned.

• The code is assigned a status indicator “Q”.

• A “Q” status indicator is defined as:

  1) Packaged services subject to separate payment under OPPS payment criteria.
  2) If criteria are not met, payment is packaged into payment for other services, including outliers. Therefore, there is no separate APC payment.

• “Q” status indicators are further divided into “T-packaged” for supervision and interpretation codes, and “STVX” packaged in other cases (e.g., composite APC codes).

• To determine if the Q status is payable depends on whether it is a ‘T-packaged’ code or ‘STVX-packaged’ code, addendum B - Table 10 in the 2008 HOPPS final rule displays codes that are subject to either being ‘T’ or ‘STVX’ packaged.

• “STVX-packaged codes” and “T-packaged codes” are paid separately when they do not meet their respective criteria for packaged payment.

• To signify that they are conditionally packaged, “STVX-packaged codes” will be assigned a status indicator “Q1”, and “T-packaged HCPCS codes” will be assigned
a status indicator “Q2” respectively in CY 2009; i.e. a procedure with status indicator Q1 is packaged if there are any procedures on the same day with status indicators: S, T, U, or X. A procedure with a status indicator Q2 is packaged if there are any other procedures on the same day with status indicator T.

- A status indicator “Q3” would be assigned to all codes that may be paid through a composite APC based on composite-specific criteria or paid separately through single code APCs when the criteria are not met. The codes with proposed status indicators “Q1,” “Q2,” and “Q3” were previously assigned status indicator “Q” for the CY 2008 OPPS.

- If the Q code on a claim is a T code, then it is paid separately. If there are multiple Q’s and T’s, the Q codes are packaged, and the highest T is paid while the other T codes are paid at 50%.

- If there are Q’s and N’s, the N’s are packaged. The Q codes need to be determined whether they are a T or STVX code. If the Q code is an STVX code, then the highest 2007 payment rate for that code is chosen, then the 2008 rate for that code (the Q code that had the highest 2007 payment rate) is applied. As mentioned above, if they are a T, then they are paid separately.

- In the payment process the “Q” status indicator will change to an “N” if the code on the claim is packaged, and to an “S”, “T”, “V” or “X” if it is paid, depending on its APC assignment.

There are certain supervision and interpretation Q codes that convert to a T. If the procedures occur on a different day, then they convert to a T code and are paid separately.

Claims

- Claims are identified or divided into “single-procedure” claims and “multiple-procedure claims”

- Multiple procedure claims cannot be used for rate-setting because the rates are set for each procedure.

- If a claim has two or more payable procedures with other packaged items, the dilemma is how to apportion the packaged costs to each procedure.

- CMS’ solution is to split multiple procedure claims into “pseudo-single claims”

CMS creates “pseudo” single claims by:

- Breaking up claims with multiple procedures but no packaged items—each separate procedure becomes a pseudo single claim, i.e. the multiple-procedure bills are used to create new “pseudo” single procedure claims.

- Grouping items by date of service and splitting the claim by date of service.
• Removing separately payable procedures thought to contain limited or no packaged costs, “bypass codes”.

• The pseudo-single claim is the sum of the procedure and any packaged items.

• In the process of creating “pseudo-single” claims for rate setting, many claims and parts of claims drop out and are not used in rate setting. If the claims used in rate setting are not typical of those that drop out, then the rate for a procedure may understate the costs that should be associated with that procedure. When a relatively small proportion of claims for a procedure are used in rate-setting, the likelihood of the rate understating costs increases.

**Example of a claim:**

<table>
<thead>
<tr>
<th>42 REV CD</th>
<th>43 DESCRIPTION</th>
<th>44 HCPCS</th>
<th>45 DATE</th>
<th>46 UNITS</th>
<th>47 CHARGES</th>
<th>48 NON-COVD CHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>’0250</td>
<td>Pharmacy-gen</td>
<td>2/17/05</td>
<td>9</td>
<td>$311.80</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>’0761</td>
<td>Treatment/ obs rm</td>
<td>47382</td>
<td>2/17/05</td>
<td>1</td>
<td>$1,189.50</td>
<td></td>
</tr>
<tr>
<td>’0278</td>
<td>Med/Surg supplies</td>
<td>C1819</td>
<td>2/17/05</td>
<td>1</td>
<td>$1,471.50</td>
<td></td>
</tr>
</tbody>
</table>


\[
\begin{align*}
\text{CCR} & \times \text{Charges} \quad \text{“Cost”} \\
0.3831 \times \$311.80 & = \$119.48 \\
0.6370 \times \$1,189.50 & = \$757.71 \\
1.0600 \times \$1,471.50 & = \$1,560.08 \\
\$2,972.80 & \rightarrow \$2,437.27 \quad \text{“Cost” for claim}
\end{align*}
\]

**Bypass Codes**

• Bypass codes are codes that are paid but pulled out of the claim for separate rate-setting regardless of what other procedures are on the claim. Currently, there are 452 codes on the bypass list.

• To become a bypass code, CMS has three requirements:
  1) The procedure must have at least 100 single claims in rate setting;
  2) Less than 5% of these claims can have packaging;
  3) And the packaging that does appear must have a median cost under $50.
Example of a Potential Bypass Code:

Breast Biopsy: 19103 (bx breast precut w/device)
This code had more than 50,000 lines in 2006 final claims, with 32% used in rate setting. The 2006 cost associated with this procedure is approximately $21.4 million. The 2008 payment rate is $864.74. The claims with these lines also had:

- 76098 (x-ray exam breast specimen) (SI=X) 29,725 lines or 60% of the time (2006 cost approx. =$1.2 million), 2008 payment rate $44.29
  * “SI = X” → Ancillary services; paid under OPPS; separate APC payment.

Policy options: 1) argue to have 76098 be a bypass code

Composite APC

- A composite ambulatory payment classification (APC) is when a single payment rate for a service which is a combination of several HCPCS codes on the same date of service (or a different date) for several major procedures.

- In the 2008 proposed rule, CMS introduced the “Composite APC” concept and proposed several specific composite APCs (e.g., for LDR prostate brachytherapy—55875 and 77778. When the two codes appear on a claim together they get the composite APC rate, when only one code appears on a claim it gets the regular APC rate for the APC the single code is assigned to.

- The individual codes may get a status indicator assignment of “Q” and be mapped to individual APCs so they are paid the usual way if they do not appear together on the same claim date.

- CMS are moving forward and establishing five imaging composite APCs based on the families of codes used in the Medicare physician fee schedule for the multiple imaging procedure payment reduction policy under that system for 2009.

- The new imaging composite APCs include:
  - Ultrasound
  - Computed tomography (CT) and computed tomographic angiography (CTA) without contrast
  - CT and CTA with contrast
  - Magnetic resonance imaging (MRI) and magnetic resonance angiography (MRA) without contrast; and
  - MRI and MRA with contrast

- CMS would like to expand on these composite categories and add more procedures into them. This would be a way for CMS to use more of its multiple claims data that is currently not used. In addition, CMS makes it clear in the final
rule that its goal is to move more towards a DRG-like model and to take this base and build episodes of care.

- CMS is currently scanning the data and looking for classes of procedures and classes of drugs that can be matched with something else. They will find whatever their data produces and will propose more matches in the future.

Example: Lung Perfusion Imaging and related procedures: 78580, 78587, 78593, 78594

These codes are all in APC 401 along with three other low incidence codes. 78580 dominates the APC. Below is the distribution of lines for these procedures:

<table>
<thead>
<tr>
<th>Procedure Cost</th>
<th>78580</th>
<th>78587</th>
<th>78593</th>
<th>78594</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lines</td>
<td>14,246</td>
<td>3586</td>
<td>4787</td>
<td>2019</td>
</tr>
<tr>
<td>Lines 78587</td>
<td>3176</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lines 78593</td>
<td></td>
<td>4474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lines 78594</td>
<td></td>
<td></td>
<td>1705</td>
<td></td>
</tr>
<tr>
<td>Lines 78580</td>
<td></td>
<td>3176</td>
<td>4475</td>
<td>1704</td>
</tr>
<tr>
<td>Radiopharm Cost</td>
<td>$.66 million</td>
<td>$.3 million</td>
<td>$.25 million</td>
<td>$.09 million</td>
</tr>
</tbody>
</table>

Policy Options: A potential composite APC structure would be something like: any claim with 78580 and one of 78587, 78593, or 78594 would be treated as a composite.

The Deficit Reduction Act and OPPS Cap as it Relates to Technical Payment Rates

The OPPS cap is imposed by the Deficit Reduction Act (DRA). The DRA mandates that CMS pay the lower of the OPPS rate or the PFS rate for the technical component of imaging procedures performed in the office setting. There is a list of codes that are subject to the DRA which are capped at the OPPS rate. This OPPS rates is important not only for the pricing of imaging in the hospital outpatient setting but also because it sets the price in the office setting. For example, if an imaging procedure is to be performed at the office setting and that procedure is on the DRA list of codes, that procedure will be paid at the either the OPPS rate or PFS (whichever is the lower of the two).

Where there is no OPPS payment for a procedure or if the procedure is packaged, then it would be paid at the PFS rate since there is no OPPS rate. The codes will remain on the DRA list of codes subject to the OPPS cap, but will not be affected by the cap. In summary, items with no OPPS cap are paid separately at the PFS rate in the office setting for 2008.
“Charge compression” is a particular form of aggregation bias where weights for high-cost cases are systematically understated and weights for low-cost cases are systematically overstated. The best known example of this comes from a hospital industry practice of applying lower markups to expensive medical devices and implantable items, but higher markups for routine medical supplies. Although most hospitals provide all of the services associate with standard cost report line numbers, they do not necessarily use all cost report lines to separately identify their costs and charges.

In August 2006, Research Triangle Institute (RTI) International was awarded a contract from CMS to investigate charge compression and other possible sources of aggregation bias in setting the cost-based relative resource weights under the inpatient prospective payment system (IPPS) using charges from claims data and cost-to-charge ratios (CCRs) from cost report data.

In August 2007, RTI was awarded a second contract to expand the techniques for refining cost ratios to the OPPS. Although total Medicare OPPS payments are much less than IPPS payments, aggregation bias is potentially a larger problem for ambulatory services than it is for DRGs when looked at from a per-payment-unit perspective. Weights for ambulatory patient classifications (APCs) are much more sensitive to distortion in cost computations because the payment units are constructed for very limited service groups.

The recent RTI reports on charge compression (January 2007 and April 2008) show low cost-to-charge ratios (CCRs) for advanced imaging services such as MR and CT scans. One set of RTI estimates suggests that hospitals on average mark up CT services by more than 1800 percent over cost (CCR of 0.054), compared to an average markup of just over 300 percent for routine radiology costs (CCR of 0.308). This roughly five-fold differential in markup of these high cost imaging studies seems too large to be an accurate reflection of typical hospital charging behavior. Accordingly, we believe the RTI CCRs are implausibly low and would result in substantial distortion of payments if used for calibrating Medicare rates. Furthermore, distortion in payment weights can influence provider behavior and possibly affect beneficiary access.