CMS Standardization Methodology For Allowed Amount– v.2

For Services Provided During - 2006 – 2012 – (updated 5/16/2013)

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Rationale for Standardization Methodology

There is great interest in evaluating the resource use of Medicare services across geographic areas. The context for such evaluations includes:

- Analyses of resource use by providers or groups of providers for purposes of confidential feedback;
- Developing episodes of care to compare provider performance in delivering a bundle of acute and post-acute services; and
- Broader analyses of geographic differences in Medicare spending.

If an analysis is limited to a single service, utilization measures can suffice to make comparisons. But a number of factors limit the usefulness of such measures:

- Similar services can be provided through multiple channels. For example, beneficiaries can receive post-acute care services in skilled nursing facilities, long-term care hospitals, inpatient rehabilitation facilities, and through home health agencies. How can you make judgments comparing SNF days, LTCH and IRF stays and HHA visits?
- The provision of similar services by different providers or practitioners, by the same practitioner in different settings, or by the same practitioner in the same setting in one or in multiple encounters has different cost implications.

Given these issues, health care spending is often used as a proxy for utilization. But if you are trying to assess use of services, should you include adjustments made to national fee schedule amounts to reflect variation in wage or practice costs? A similar question is raised with regard to payments to providers that support larger Medicare program goals. The process of going from actual spending to adjusted spending that can be used in making comparisons of service use is called standardization. Risk adjustment deals separately with differences in health status.

Given the volume of claims, the complexity of payment rules, and the fact that certain information used by the MACs and Shared Systems to determine payment is not retained on the claim as stored in the CMS Integrated Data Repository (IDR), there are tradeoffs involved in developing a standardization methodology.

This standardized payment methodology:

- Eliminates adjustments made to national allowed amounts to reflect differences in regional labor costs and practice expenses (measured by hospital wage indexes and geographic practice cost indexes);

- Substitutes a national amount in the case of services paid on the basis of state fee schedules.

- Eliminates payments to providers that support larger Medicare program goals, such as the payments to hospitals for graduate medical education (GME), indirect medical education (IME), and for serving a large population of poor and uninsured (i.e., disproportionate share payments(DSH));

- Maintains differences that exist in actual allowed amounts resulting from:
  - the choice of setting in which a services is provided;
  - the choice about who provides the service;
  - the choice as to whether to provide multiple services in the same encounter; and
  - differences in provider experience with regard to outlier cases.

- Treats outlier payments as a given rather than trying to determine what outlier payment would have been in a standardized world. Actual outlier payments are adjusted for differences in wages using the wage index.

General Considerations

An indicated above, standardization is performed after the fact rather than as individual claims are processed. For this purpose final action claims from CMS's Integrated Data Repository (IDR) were used. Appendix A of this document notes the differences between the up-to-date price standardization methodology used by the Centers for Medicare and Medicaid Services (CMS) presented in this document and the "CMS Price Standardization" document posted on 1/31/12.

Part A claims and Part B Institutional claims were restricted to claims with Actual Payment (`clm_pmt_amt`) greater than or equal to $0. Part B Non-institutional claim lines were restricted to allowed line items, determined based on `line_prcsng_ind_cd` values of "A" (Allowed), "R" (Reprocessed) or "S" (Secondary payer).
The links below provides information about individual claims field discussed in this document.

http://www.resdac.org/ddvh/index.asp

http://www.ccwdata.org/data-dictionaries/index.htm

Inpatient Hospital (Acute Hospital)

Claims included

NCH_CLM_TYPE_CD = 60, 61 and

Substr(PROVIDER_ID,3,1) = 0 OR Substr(PROVIDER_ID,3,2) = 13

In general – the standardization method for acute hospital claims follows the Inpatient Prospective Payment System (IPPS) payment rules. All IPPS hospitals, as well as Maryland waiver hospitals, Critical Access Hospitals (CAHs), and cancer hospitals are included in this section. Although Maryland hospitals, CAHs and cancer hospitals are paid under special systems, they provide a similar set of acute hospital services as IPPS hospitals. Since the goal of standardization is to allow for resource use comparisons across the country on an equal basis, all acute hospitals are included in this section.

The standardization methodology depends on whether or not a claim is for a short-stay transfer or post-acute (PAC) discharge for certain Medicare Severity-Adjusted Diagnosis-Related Groups (MS-DRGs). Interim claims are ignored except for cases where standardization relies initially on the observed payment amount. Outlier payments are adjusted for the wage index. New technology and pass through payments for blood clotting factors are added to the standardized allowed amount. Finally, claims with a $0 actual payment and no Medicare covered days are given a standardized payment of $0. Medicare covered days are found in the variable CLM_UTLZTN_DAY_CNT.

Specifically

- Short-stay transfers (excluding MS-DRG 789) or PAC discharges for certain MS-DRGs are identified based on having a length of stay (LOS) + 1 that is less than the geometric mean LOS for that MS-DRG and either:
    - the discharge status code indicates a transfer or
    - the discharge status code indicates discharge to PAC and the MS-DRG is on the list of MS-DRGs covered by the discharge to PAC policy
  - The length of stay is the greater of the Discharge date minus the Admission date or 1. LOS=max(dschrg_dt – admsn_dt,1)
      - Transfer is indicated by any of the following values in PTNT_DSCHRG_STUS_CD:
          - 02 - discharged/transferred to other short term general hospital for inpatient care
          - 66 - discharged/transferred to a Critical Access Hospital (CAH)

- Discharge to PAC is indicated by any of the following values in `PTNT_DSCHRG_STUS_CD`:

  - 03 - Discharged/transferred to skilled nursing facility (SNF)
  - 05 - Discharged/ Transferred to a children's or cancer hospital
  - 06 - Discharged/transferred to home care of organized home health service organization.
  - 62 - Discharged/transferred to an inpatient rehabilitation facility including distinct parts units of a hospital
  - 63 - Discharged/transferred to a long term care hospitals
  - 65 - Discharged/Transferred to a psychiatric hospital or psychiatric distinct unit of a hospital

- Yes/No variable on the yearly DRG weights file indicates whether MS-DRG on the claim is subject to the "discharge to PAC" policy based on the list of MS-DRGs in the relevant regulation.
- Pass through payments for blood clotting factors are found in line items with revenue center code 0636 and a blood clotting factor Healthcare Common Procedure Coding System (HCPCS) code. The blood clotting HCPCS are taken from the drug pricing files for a given year, and the payment is calculated by multiplying the units on the claim by the ASP fee schedule amount.
- New Technology Amounts are found in Value Code 77.
- Any reductions for device credits are subtracted from the standardized amount. This is found in Value Code FD.
- Because the DRG on the claim can be reduced to a lower severity level due to the presence of a Hospital Acquired Infection (HAC), the methodology uses the MS-DRG grouper to assign each claim the DRG without HAC logic. The HAC reduction is a penalty, and using the DRG without the HAC reduction more accurately represents the resource use of the case and avoids rewarding poor care.

- Interim claims were identified based on discharge status code or discharge date.

  `PTNT_DSCHRG_STUS_CD` = 30 or `DSCHRG_DT` is Null

1) Claims from all hospitals excluding claims:
  - **for transfers, or discharges to PAC (for certain MS-DRGs); or**
  - **that are interim claims**

Description

- The standardized amount is built up from the national base payment rates for labor, non-labor, and capital.

- The sum of these amounts is multiplied by the DRG weight for the discharge. For claims without a valid MS-DRG, the method for Other Inpatient (described below) is applied.
- Any DRG operating outlier payments from the claim are added to this amount after adjusting for differences in wages using the wage index applicable to the hospital. The weight applied to the hospital wage index is equal to the labor base rate divided by the sum labor and non-labor base rates (Labor Ratio). In addition, any capital outlier payments from the claim are added to this amount after adjusting for differences in wages using the geographic adjustment factor applicable to the hospital. The entire amount is adjusted by the geographic adjustment factor (wage index raised to the power of 0.6848).
- For some hospitals, the sum of the adjusted operating and capital outlier payments is divided by a hospital-specific low volume adjustment (in order to undo this payment adjustment).
- In the presence of value code FD, the full device payment amount is reduced.
- Any payment for new technology is taken without adjustment.
- The base rates, the DRG schedule, and the IPPS wage index crosswalk used depend on the fiscal year of the claim.

Formula:

$$
\begin{aligned}
Standard\ allowed \\
= (Labor\ Base + Nonlabor\ Base + Capital\ Base) \times DRG\ Weight \\
+ \left(\frac{DRG\ Outlier\ Payment}{(Labor\ Ratio\ \times Wage\ Index) + Nonlabor\ Ratio} \right. \\
\left. + \frac{Capital\ Outlier\ Payment}{Wage\ Index^{0.6848}} \right) \times Low\ Volume\ Adjustment, if\ applicable \\
+ New\ Tech\ Payment + Clotting\ factor\ payment \\
- Device\ payment, if\ applicable
\end{aligned}
$$

Sources

- National labor base rate, national non-labor base rate, and national capital base rate are taken from the relevant year's regulation.
- DRG weight (`DRG_WGT`) is determined by looking up the weight from the relevant year's regulation for the MS-DRG number listed on the claim (`CLM_DRG_CD`).
- DRG operating outlier payment from the claim is `NCH_DRG_OUTLIER_APRV_PMT_AMT`.
- Capital Outlier payment from the claim is `CLAIMS_PPS_CAPITAL_OUTLIER_AMOUNT`.
- The hospital-specific low volume adjustment is taken from each year's regulation.
- New technology payments appear in the `CLAIM_VALUE_AMOUNT` when "77" is in `CLAIM_VALUE_CODE`.
- Device payments appear in the `CLAIM_VALUE_AMOUNT` when "FD" is in the `CLAIM_VALUE_CODE`.

- Wage index is determined by finding the post reclassification CBSA from the inpatient provider specific file for the provider ID on the claim (`PROVIDER_ID`), and then using the IPPS wage index crosswalk included in the IPPS Pricer. Default value is 1.0.

2) Claims for transfers or discharges to PAC (for certain MS-DRGs)

Description

The standardized amount is the lesser of the normal allowed amount described above or a per diem amount that is built up and excludes IME, DSH, GME, and adjustment for labor differences.

- For transfer between hospitals, the per diem is equal to the normal MS-DRG payment divided by the geometric mean length of stay (GLOS) for that MS-DRG. The hospital receives twice the per diem on day 1 and the per diem on subsequent days, up to the normal MS-DRG amount.
- The per diem is the same for most PAC transfers; but for certain MS-DRGs, the hospital receives an amount that varies based on length of stay but which is heavily frontloaded for expenses on day 1.
- For claims without a valid MS_DRG, the method for Other Inpatient (described below) is applied.

Formula

For transfers and most PAC discharges

$$Standard\ allowed = the\ lesser\ of$$

$$(Labor\ Base + Nonlabor\ Base + Capital\ Base)xDRG\ Weight$$

or

$$\frac{(Labor\ Base + Nonlabor\ Base + Capital\ Base)xDRG\ Weight}{GMLOS} \times (LOS\ + 1)$$

Plus

$$\left(\frac{DRG\ Outlier\ Payment}{(Labor\ Ratio\ \times Wage\ Index) + Nonlabor\ Ratio} + \frac{Capital\ Outlier\ Payment}{Wage\ Index^{0.6848}}\right)$$
$$\times Low\ Volume\ Adjustment, if\ applicable + Clotting\ factor\ payment$$
$$+ New\ Tech\ Payment - Device\ payment, if\ applicable$$

For the PAC discharges for "Special Pay MS-DRGs"

$$Standard\ allowed = the\ lesser\ of$$

$$(Labor\ Base + Nonlabor\ Base + Capital\ Base)x\ DRG\ Weight$$

or

$$(Labor\ Base + Nonlabor\ Base + Capital\ Base)x\ DRG\ Weight\ x\ 0.5\ x$$

$$(1 + \frac{LOS + 1}{GMLOS})$$

Plus

$$\left(\frac{DRG\ Outlier\ Payment}{(Labor\ Ratio\ \times Wage\ Index) + Nonlabor\ Ratio} + \frac{Capital\ Outlier\ Payment}{Wage\ Index^{0.6848}}\right)$$
$$\times Low\ Volume\ Adjustment, if\ applicable + Clotting\ factor\ payment$$
$$+ New\ Tech\ Payment - Device\ payment, if\ applicable$$

Sources

- National labor base rate, national non-labor base rate, and national capital base rate are taken from the relevant year's regulation.
- DRG weight (DRG_WGT) is determined by looking up the weight from the relevant year's regulation for the MS-DRG number listed on the claim (CLM_DRG_CD).
- Length of stay is max(DSCHRG_DT-ADMSN_dt,1).
- The GMLOS for each MS-DRG comes from a table for the relevant year.
- DRG operating outlier payment from the claim is NCH_DRG_OUTLIER_APRV_PMT_AMT.
- Capital Outlier payment from the claim is CLAIMS_PPS_CAPITAL_OUTLIER_AMOUNT.
- The hospital-specific low volume payment adjustment is taken from each year's regulation. The factor multiplied above is 1 divided by the payment adjustment.
- New technology payments appear in the CLAIM_VALUE_AMOUNT when "77" is in CLAIM_VALUE_CODE.
- Device payments appear in the CLAIM_VALUE_AMOUNT when "FD" is in the CLAIM_VALUE_CODE.
- Wage index is determined by finding the post reclassification CBSA from the inpatient provider specific file for the provider ID on the claim (PROVIDER_ID), and then using the IPPS wage index crosswalk included in the IPPS Pricer. Default value is 1.0.

3) Interim claims

Description

o   For these claims the standardized amount is set to 0.

Formula

Standardized allowed = 0

Critical Access Hospital (CAH) - Inpatient Services

Claims included

NCH_CLM_TYPE_CD = 60, 61 and Substr(PROVIDER_ID,3,2) = 13

Description

The standardized amount is calculated under the IPPS methodology in the above section.

Other Inpatient

Claims included

`NCH_CLM_TYPE_CD` = 60, 61 and otherwise not an acute hospital CAH, LTCH, IPF or IRF.

Description

The standardized amount starts with the actual payment amount on the claim and adds back in any deductible & coinsurance. This total is then adjusted for differences in wages using the applicable area wage index. Finally, claims with a $0 actual payment and no Medicare covered days are given a standardized payment $0. Medicare covered days are found in the variable `CLM_UTLZTN_DAY_CNT`.

Formula

Standardized allowed =

$$\frac{Actual\ payment + \ Deductible \ + \ Coinsurance}{(Labor\ Ratio\ x\ Wage\ Index) + Nonlabor\ Ratio}$$

Sources

- Actual payment amount is `CLM_PMT_AMT`.
- Labor ratio is IPPS Labor Base rate / (IPPS Labor Base Rate + IPPS Non-Labor Base Rate)
- Non-labor ratio is 1- Labor ratio
- Wage index is determined based on `PROVIDER_ID.` The CBSA of the provider is determined if possible from the Inpatient Provider Specific File, and the associated wage index is used from the IPPS wage index crosswalk on the CMS website. If the CBSA of a provider cannot be determined, a wage index of 1.0 is assumed.

Inpatient Psychiatric Facility (IPF)

Claims included

NCH_CLM_TYPE_CD = 60, 61 and Substr(PROVIDER_ID,3,2) equal to 40 - 44 or Substr(PROVIDER_ID,3,1) equal to

- o 'M' – Psych unit in CAH
- o 'S' – Psych unit in IPPS hospital

Description

- The standardized amount is built up from the national base payment rate multiplied by the IPF adjustment factor (equivalent of weight), the age factor, the comorbidity factor, and the variable per diem factor (based on LOS)
- Any outlier payments from the claim are added to this amount after adjusting for differences in wages using the wage index applicable to the hospital. The non-labor share is also adjusted by a cost of living adjustment factor (COLA) for Alaska and Hawaii facilities.
- If the claim indicates that electroconvulsive therapy was provided, the electroconvulsive therapy base amount is multiplied by electroconvulsive therapy units.
- In the presence of modifier code FD, the full device payment amount is reduced.
- Any payment for new technology is taken without adjustment.
- Finally, claims with a $0 actual payment and no Medicare covered days are given a standardized payment $0. Medicare covered days are found in the variable CLM_UTLZTN_DAY_CNT.

Formula

$$
\begin{aligned}
Standardized\ allowed \\
= (Base \times IPF\ Adjustment\ factor\ \times age\ factor\ \times cormorbid\ factor \\
\times variable\ per\ diem\ factor) \\
+ \frac{Outlier\ Payment}{(IPF\ Labor\ Share\ \times Wage\ Index) + COLAx(1 - Labor\ Share)} \\
+ (Electroconvulsive\ therapy\ base\ \times units) + New\ Techonolgy\ Payment \\
- Device\ payment, if\ applicable
\end{aligned}
$$

Sources

- National base payment amount, electroconvulsive therapy base amount, and IPF labor share taken from the relevant year's regulation.
- IPF factor is determined by looking up the weight from the relevant year's payment calculator tool for the MS- DRG number listed on the claim (CLM_DRG_CD). For MS-DRGs without a factor, the ipf_wgt defaulted to 1.

- The age factor is determined by looking up the weight for the beneficiary's age from the relevant year's payment calculator tool. The beneficiary's age is determined by using `bene_DOB` and the `clm_from_dt` on the claim.
- The comorbidity factor is determined for each comorbidity by looking up the weight associated with the diagnosis code, procedure code, or combination on the relevant year's comorbidity codes worksheet. All the secondary diagnoses and procedures on the claim (`DGNS_CD` and `PRCDR_CD`) are examined.
- The variable per diem factor is determined by looking up the weight for the beneficiary's LOS from the relevant year's payment calculator tool. The beneficiary's LOS=max(`DSCHRG_DT – ADMSN_DT`, 1).
- There is a differential payment for the first day of the stay depending on whether the facility had a full service ER. We use the provider specific file to make this determination when `TEMPRELF`=Y.
- Outlier payment from the claim is `NCH_DRG_OUTLIER_APRV_PMT_AMT`.
- Wage index is determined based on `PROVIDER_ID.` The CBSA of the provider is determined from the IPF provider specific file and the associated wage index is used from the IPF wage index crosswalk included in the IPF pricer. If the CBSA of a provider cannot be determined, a wage index of 1.0 is assumed.
- Electroconvulsive therapy units come from `REV_CNTR_UNIT_CNT` when `REV_CNTR` = 0901 and there is a `PROC_CD` = 94.27 on the claim.
- New technology payments appear in the `CLAIM_VALUE_AMOUNT` when "77" is in `CLAIM_VALUE_CODE`.
- Device payments appear in the `CLAIM_VALUE_AMOUNT` when "FD" is in the `CLAIM_VALUE_CODE.`

Long-Term Care Hospital (LTCH)

Claims included

`NCH_CLM_TYPE_CD` = 60, 61 and Substr (`PROVIDER_ID`, 3,2) = 20-22

In general – standardization method for LTCH claims depends on whether or not the claim is for a short stay.

Specifically

- Short stay outliers are claims with a length of stay less than or equal to 5/6 of the geometric mean length of stay for the LTC-DRG
- The beneficiary's LOS=max(`DSCHRG_DT - ADMSN_DT`, 1).
- Finally, claims with a $0 actual payment and no Medicare covered days are given a standardized payment $0. Medicare covered days are found in the variable `CLM_UTLZTN_DAY_CNT`.

1) Short stay claims

Description

- The standardized amount starts with the actual payment amount on the claim and adds back in any deductible & coinsurance. This total is then adjusted for differences in wages using the wage index applicable in the area and a cost of living adjustment (COLA) for hospitals in Alaska and Hawaii. (The weight applied to the hospital wage index is equal to LTCH labor share.)

Formula

$$Standardized\ allowed = \frac{Actual\ payment + Deductible + Coinsurance}{(LTCH\ Labor\ Share \times Wage\ Index) + COLAx(1 - LTCH\ Labor\ Share)}$$

Sources

- Actual payment amount is `CLM_PMT_AMT`.
- Wage index is determined by using the LTCH provider specific file and the `PROVIDER_ID` to obtain the CBSA. The associated wage index is used from the LTCH wage index crosswalk included with the LTCH pricer. If the CBSA of a provider cannot be determined, a wage index of 1.0 is assumed.

2) Claims with normal length of stay

Description

- The standardized amount is built up from the national base payment rate which is multiplied by the LTC-DRG weight for the discharge.
- Any DRG outlier payments from the claim are added to this amount after adjusting for differences in wages using the applicable wage index. The weight applied to the hospital wage index is equal to the labor base rate divided by the sum of labor and non-labor base rates (Labor Ratio). For hospitals in Alaska and Hawaii, a cost of living adjustment (COLA) is also used to adjust the non-labor share.
- The base rates and the DRG schedule used depend on the fiscal year of the claim.
- In the presence of modifier code FD, the full device payment amount is reduced.
- Any payment for new technology is taken without adjustment.
- Payment for any hemophilia clotting factors is also added.

Formula

$$
\begin{aligned}
Standardized\ &allowed \\
&= (Base\ \times LTCDRG\ Weight) \\
&+ \frac{DRG\ Outlier\ Payment}{(LTCH\ Labor\ Share\ \times Wage\ Index) + COLAx(1 - LTCH\ Labor\ Share)} \\
&+ New\ Technology\ Payment + Clotting\ Factor\ payment \\
&- Device\ payment, if\ applicable
\end{aligned}
$$

Sources

- National base rate and labor share taken from the relevant year's regulation.
- LTC-DRG weight (`LTC_DRG_WGT`) is determined by looking up the weight from the relevant year's regulation for the LTC-DRG number listed on the claim (`CLM_DRG_CD`).
- DRG Outlier payment from the claim is `NCH_DRG_OUTLIER_APRV_PMT_AMT`.
- Wage index is determined based on `PROVIDER_ID`. The CBSA of the provider is determined from the LTCH provider specific file and the associated wage index is used from the LTCH crosswalk included in the LTCH pricer.
- New technology payments appear in the `CLAIM_VALUE_AMOUNT` when "77" is in `CLAIM_VALUE_CODE`.
- Device reductions appear in the `CLAIM_VALUE_AMOUNT` when "FD" is in the `CLAIM_VALUE_CODE`.
- Clotting factor payments are based on the ASP fee schedule and the number of units on the clotting factor line item

Inpatient Rehabilitation Facility (IRF)

Claims included

`NCH_CLM_TYPE_CD` = 60, 61 and Substr (`PROVIDER_ID`, 3,4) = 3025 - 3099 or Substr (`PROVIDER_ID`, 3,1) equal to

- o 'R' – Rehab unit in CAH
- o 'T' – Rehab unit in IPPS hospital

In general – standardization method for IRF claims depends on whether or not the claim is for a short stay with discharge to certain post-acute settings. Claims with a $0 actual payment and no Medicare covered days are given a standardized payment $0. Medicare covered days are found in the variable `CLM_UTLZTN_DAY_CNT`.

Specifically

- The short stay formula is used if the Pricer Return code is 02, 03, 06, 07, 12, 13, 16 or 17. These codes correspond to a situation where (for CMGs/tiers other than A5001):
  - o Discharge status code is either:

    - 02 - discharged/transferred to other short term general hospital for inpatient care
    - 03 - Discharged/transferred to skilled nursing facility (SNF)
    - 61 - hospital-based, Medicare approved swing bed within the IRF
    - 62 - Discharged/transferred to an inpatient rehabilitation facility including distinct parts units of a hospital
    - 63 - Discharged/transferred to a long term care hospitals; or
    - 64 - Discharged/transferred to a nursing facility certified under Medicaid but not under Medicare (eff. 10/2002): **AND**
  - o Length of stay (LOS) is less than the average length of stay for that CMG and tier.
  - o The beneficiary's LOS=max(`DSCHRG_DT - ADMSN_DT`, 1).

1) Normal IRF Claims

Description

- The standardized amount is built up from the national base payment rate which is multiplied by the CMG weight for the discharge.

- Any outlier payments from the claim are added to this amount after adjusting to account for differences in wage cost. The weight applied to the hospital wage index varies by year.
- The base rates and the CMG schedule used depend on the fiscal year of the claim.
- In the presence of value code FD, the full device offset amount is subtracted.
- Any payment for new technology is taken without adjustment.
- The payment for hemophilia clotting factors is also added, if applicable.

Formula

$$\begin{aligned} Standardized\ &allowed \\ &= (Base \times CMG\ weight) \\ &+ \frac{Outlier\ Payment}{(IRF\ Labor\ Share \times Wage\ Index) + (1 - IRF\ Labor\ Share)} \\ &+ New\ Technology\ Payment + Clotting\ factor\ payment \\ &- Device\ payment, if\ applicable \end{aligned}$$

Sources

- National base rate and labor share taken from the relevant year's regulation.
- The CMG weights are taken from each year's regulation
- The CMG code found in `APCHIPPS` or `HCPCS_CD` when `Rev_cntr` = 0024:
  - The CMG code in APCHIPPS is used if it is not missing, otherwise the code in HCPCS_CD is used
  - The letter at the start determines the tier - B-tier 1, C-tier 2, D-tier-3, A-none
  - The last four digits gives the CMG number
- Outlier payment from the claim is `NCH_DRG_OUTLIER_APRV_PMT_AMT`.
- Wage index is determined based on `PROVIDER_ID` and the IRF provider specific file. The CBSA of the provider is taken from the IRF provider specific file, and the associated wage index is used from the IRF wage index file included with the IRF pricer on the CMS website. If the CBSA of a provider cannot be determined, a wage index of 1.0 is assumed.
- New technology payments appear in the `CLAIM_VALUE_AMOUNT` when "77" is in `CLAIM_VALUE_CODE`.
- Device payments appear in the `CLAIM_VALUE_AMOUNT` when "FD" is in the `CLAIM_VALUE_CODE`.
- Clotting factor payments are based on the ASP fee schedule, and the number of units listed on the line item for the clotting factor

2) Short Stay IRF Claims

Description

- The standardized amount is built up from a CMG/tier specific per diem amount.
- Any outlier payments from the claim are added to this amount after adjusting to account for differences in wage cost. The weight applied to the IRF wage index is equal to the IRF labor share.
- In the presence of modifier code FD, the full device payment amount is reduced.
- Any payment for new technology is taken without adjustment.
- Any clotting factor payment is added.

Formula

$$Standardized\ allowed$$
$$= \frac{Base \times CM\ Weight \times (LOS + 0.5)}{Average\ LOS}$$
$$+ \frac{Outlier\ Payment}{(IRF\ Labor\ Share \times Wage\ Index) + (1 - IRF\ Labor\ Share)}$$
$$+ New\ Techonology\ Payment + Clotting\ factor$$
$$- Device\ payment, if\ applicable$$

Sources

- See above.
- Length of stay is max(DSCHRG_DT − ADMSN_DT, 1).
- The average LOS for each CMG-Tier comes from a table for the relevant year.

Skilled Nursing Facility (SNF)

Claims included

`NCH_CLM_TYPE_CD` = 20, 30 (for beneficiaries with Part A who have not exhausted their coverage)

`NCH_CLM_TYPE_CD` = 40, bill types 22x (for beneficiaries without Part A or who have exhausted their coverage) and 23X (outpatient services provided by SNFs)

In general – the standardization method for SNF claims depends on whether the beneficiary is receiving traditional inpatient services and has Part A coverage available; and if so, whether the claim is for a CAH swing bed or a PPS SNF. Finally, claims with a $0 actual payment are given a standardized payment $0.

Specifically

- For CAH Swing bed claims, the base claim record does not link with a revenue center record with `REV_CNTR` = 0022. PPS SNF claims do link.

1) CAH Swing bed claims

Description

The standardized amount starts with the actual payment amount on the claim and adds back in any coinsurance. This total is then adjusted for differences in area wages.

Formula

Standardized allowed =

$$\frac{Actual\ payment\ +\ Coinsurance}{(SNF\ Labor\ Share\ x\ Wage\ Index) + (1 - SNF\ Labor\ Share)}$$

Sources

- Actual payment amount is `CLM_PMT_AMT` plus any primary payer amount on the claim.
- SNF labor share taken from the relevant year's regulation.
- Wage index is determined based on `PROVIDER_ID.` The first two digits of the provider ID are used to identify the provider's state. Then, the state rural wage index from the SNF crosswalk on CMS website is determined.

2) PPS SNF Claims

Description

- In each year's regulation, an urban and a rural rate are published for each RUG. The standardized amount is built up from the average of these urban and rural base rates for each RUG.
- This per diem amount is multiplied by the number of covered days for each RUG on the claim.
- An additional 128% is provided for beneficiaries with AIDS.
- If the RUG on the revenue center line cannot be matched to a RUG weight, we follow the formula for CAH swing beds.

Formula

Standardized allowed =

$$Applicable\ Per\ Diem \times Days \times 2.28\ (AIDS\ adjustment, if\ applicable)$$

Sources

- Various base rates taken from the relevant year's regulation and are the average of the urban and rural rates.
- Number of SNF days is `rev_cntr_unit_cnt.`
- AIDS adjustment is applicable if the first 3 characters of any diagnoses listed on the claim (`dgns_cd`) are 042.
- On line items with `REV_CNTR` = 0022, the RUG is the first three characters of `HCPCS_CD`.

3) SNF Claims for beneficiaries without Part A or who have exhausted their coverage and Claims for outpatient services provided by SNFs

Description

- We first try to match the HCPC on each revenue center line to various Part B fee schedules in the following order:
    - the physician fee schedule
    - the lab fee schedule
    - the ambulance fee schedule &
    - DMEPOS fee schedule

- The standardization methodology is the same in concept as that for relevant fee schedule; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names) and where there may be policy differences in adjustments made for institutional claims vs. non-institutional claims (e.g. adjustment in 2011 for multiple therapy services).

- For remaining revenue center lines that don't match, the standardized allowed is equal to the actual allowed.

Home Health Agency (HHA)

Claims included

NCH_CLM_TYPE_CD = 10

NCH_CLM_TYPE_CD = 40, bill type 34X

In general – standardization method for HHA claims depends on claim type (i.e., 10 or 40) and for claim type 10 whether or not the claim receives special treatment. If actual allowed is zero, then standard allowed is set to zero.

Specifically

Claims have special treatment if any of the following are applicable:

- REV_CNTR = 0023 is indicated more than once on a single claim (this occurs when there are more than one HHRGs on a single claim); or
- PTNT_DSCHRG_STUS_CD = '06' (discharge to another HHA) indicates Partial Episode Payment
- CLM_HHA_TOT_VISIT_CNT < 5 indicates Low Utilization Payment Episode

1) Claim type 10 – Significant Change in Condition
- For claims prior to 2008, some claims have more than one 0023 line item. In these cases, we build up the payment in the same manner as a full episode. However, each HHRG is weighted by the number of days in the revenue center units field. The sum of these across the HHRG's on a claim is 60.
- Any outlier payments from the claim are added to this amount after adjusting to account for differences in wage costs. The weight applied to the wage index is equal to the HHA labor share.
- Any add-ons for prosthetics, DME, or O2 are taken as is from the claim

Formula

$Standardized\ Allowed =$

$\sum [[(Base \times HHRG\ weight)] \times (Days)/60]$

$$+ \frac{Outlier\ Payment}{(HHA\ Labor\ Share \times Wage\ Index) + (1 - HHA\ Labor\ Share)}$$

$$+ Actual\ payment\ for\ Addons$$

Sources

- Days for each HHRG are found in the `rev_cntr_unit_cnt` variable.
- See Other HHA Claims for remaining sources.

2) Claim type 10 – Low Utilization Payment Adjustment (LUPA) Episodes

- We build up the claim amount using the number of visits of each type and the associated per-visit base rate for the calendar year. For 2008 claims and later, if the episode is the first in 60 days, then an add-on amount is added.

Formula

Standardized Allowed =

$$\left(\sum \# \ visits \ of \ each \ type \ x \ Visit \ rate \ of \ each \ type\right) + (LUPA \ add \ on, if \ applicable)$$

Sources

- Per-visit rates are taken from the relevant year's regulation. The average of urban and rural rates is used.
- Number of visits is the number of line items of each type (042x, 043x, 044x, 055x, 056x, 057x).

3) Claim type 10 - PEP Claims

- We build up the full payment amount as if it were a full episode, then multiply by the number of days between the first and last visit divided by 60.
- For claims for 2008 and forward, a supply amount is added based on 5th position HIPPS code.
- Any outlier payments from the claim are added to this amount after adjusting to account for differences in wage costs. The weight applied to the wage index is equal to the HHA labor share.
- Any add-ons for prosthetics, DME, or O2 are taken as is from the claim.

Formula

$Standardized\ Allowed =$
$[(Base \times HHRG\ weight) + Supply\ Amount]$ x (Last visit date- First visit date)/60

$$+ \frac{Outlier\ Payment}{(HHA\ Labor\ Share\ x\ Wage\ Index) + (1 - HHA\ Labor\ Share)}$$

$$+ Actual\ payment\ for\ Addons$$

Sources

- Labor share taken from the relevant year's regulation.
- Visit dates are for line items with revenue center codes in 042x, 043x, 044x, 055x, 056x, 057x. The date is found in REV_CNTR_DT.
- See Other HHA Claims for rest of sources.

4) Claim type 10 - Full Episode HHA Claims

Description

- The standardized amount is built up from the base rate which is multiplied by the applicable HHRG weight based on first 4 positions of HIPPS code. For claims from April 1st, 2010 onward, the base rate is the average of the rural and urban rate.
- For claims for 2008 and forward, a supply amount is added based on 5th position HIPPS code. The average of the rural and urban rate is used.
- Any outlier payments from the claim are added to this amount after adjusting to account for differences in wage costs. The weight applied to the wage index is equal to the HHA labor share.
- Any add-ons for prosthetics, DME, or O2 are taken as is from the claim.

Formula

Standardized Allowed =

$$(Base \times HHRG\ weight) + Supply\ Amount$$

$$+ \frac{Outlier\ Payment}{(HHA\ Labor\ Share\ x\ Wage\ Index) + (1 - HHA\ Labor\ Share)}$$

$$+ Actual\ payment\ for\ Addons$$

Sources

- Base rates taken from the relevant year's regulation. Average of rural and urban rate is used.
- HHRG weight (`HIPPS_WGT`) is the weight corresponding to the HHRG which is either the first 4 characters of `apc` or – when `apc`='00000' – the first 4 characters of `hcpcs_cd`. In 2007, and to some extent in 2008 HHRG's, were three characters in the schedule, so the HHRG is the 3 characters from the 2nd position to the 4th position of `hcpcs_cd`.
- HHRG supply weight is the weight corresponding to either the 5th character of `apc` or –if `apc`='00000' – the 5th character of `hcpcs_cd`.
- Outlier payment is taken from `CLM_VAL_AMT` on the claim when `VAL_CD`=17.
- Wage index is determined based on the CBSA of the beneficiary. If the value code (`VAL_CD`) = 61, the value amount (`VAL_AMT`) is the code for the CBSA of the beneficiary. The associated wage index is taken from the HH wage index file included in the HH Pricer software.   If the CBSA of a beneficiary cannot be determined, a wage index of 1.0 is assumed.
- Add-ons are taken from `REV_CNTR_PMT_AMT` and `Revenue Center Coinsurance/Wage Adjusted Coinsurance Amount` on the claim when `REV_CNTR` is:
  - 0274 - prosthetics
  - 029* - for DME
  - 060* - for oxygen

5) Claim type 40

Description

- The standardized allowed amount for these claims is calculated in the same manner as SNF claims with bill types 22x and 23x (i.e., use all relevant fee schedules to search for the line item codes).

Hospice

Claims included

NCH_CLM_TYPE_CD = 50

In general – standardization method for Hospice claims depends on whether the revenue center line is for certain physician or nurse practitioner services or one of the four hospice service categories. Since continuous home care is billed at an hourly rate, it has a different formula than the other three service types. If actual payment is zero then standard allowed is set to zero. The base rates used depend on the fiscal year of the date of service on the claim.

Specifically

Revenue center lines are categorized based on the revenue center code used (REV_CNTR)

- 0657 indicates a revenue center line for services furnished to patients by physician or nurse practitioner
- 0652 indicates a revenue center line for continuous home care
- 0651 indicates a revenue center line for routine home care
- 0655 indicates a revenue center line for inpatient respite care
- 0656 indicates a revenue center line for general inpatient care

1) Revenue center lines for services furnished to patients by physician or nurse practitioners

Description

Hospice line items with revenue code 0657 are paid under the physician fee schedule, so the standardization methodology is the same in concept as that for physician services; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names). On these line items, the modifier code GV indicates nurse practitioner services, and these receive the 15% nurse practitioner reduction.

2) Revenue center lines for continuous home care (CHC)

Description

- The standardized amount is built up from the applicable base rate which is multiplied by the portion of the day (hours/24) during which services were provided.

Formula

$$Standardize\ Allowed = CHC\ base\ \times min\left(\frac{rev\ cntr\ unit\ cnt}{4, if\ applicable}, 24\right)$$

Sources

- Base rates are taken from the annual Change Request for the Medicare Claims Processing Manual issued in late July / early August every year.
- For claims 2007 and later, units are reported in 15 minute increments, so the `rev_cntr_unit_cnt` must be divided by 4. We limit the units to 24 hours, which is a claim processing edit not reflected on the paid claim in the IDR.
- If the unit count is less than 32 (8 hours), one unit of Routine Home Care is assigned instead.

3) Revenue center lines routine home care (RHC), inpatient respite care (IRC) and general inpatient care (GIC)

Description

- The standardized amount is built up from the applicable base rate, which is multiplied by the unit count.

Formula

$$Standardized\ Allowed = Base\ \times min(rev\ center\ unit\ cnt, LOS)$$

Sources

- Base rates are taken from the annual Change Request for the Medicare Claims Processing Manual issued in late July or early August every year.
- Units are reported in days. They are limited to have a maximum of the length of stay (LOS). The LOS is equal to UTIL_DAY, the number of utilization days reported on the claim. .

Rural Health Clinic (RHC) or Federally Qualified Health Center (FQHC)

Claims included

`NCH_CLM_TYPE_CD` = 40 and `clm_fac_type_cd`='7' and either:

- `clm_srvc_clsfctn_type_cd`='1' - RHC; or
- `clm_srvc_clsfctn_type_cd`='3' (or "7" starting in 2010) - FQHC

Description

The standardized amount starts with the actual payment amount on the claim which is then adjusted for differences in wages using the wage index applicable in the area.

Formula

Standardized Allowed =

$$\frac{(Actual\ payment + coinsurance) + \ Deductible}{(OPD\ Labor\ Share\ x\ Wage\ Index) + (1 - OPD\ Labor\ Share)}$$

Sources

- Actual payment amount is `rev_cntr_prvdr_pmt_amt`.
- OPD labor share taken from the relevant year's regulation.
- Wage index is determined based on `PROVIDER_ID.` The CBSA of the provider is taken from the OSCAR provider database and the associated wage index is used from the OPPS wage index crosswalk on CMS website. For RHCs, if the CBSA of a provider cannot be determined, the state rural wage index is used. For FQHCs, a wage index of 1.0 would be used.
- Part B deductible from the claim is `rev_cntr_cash_ddctbl_amt`

Comprehensive Outpatient Rehabilitation Facility (CORF) and Outpatient Rehabilitation Facility (ORF)

Claims included

NCH_CLM_TYPE_CD = 40 and clm_fac_type_cd='7' and either:

- clm_srvc_clsfctn_type_cd='4' - ORF; or
- clm_srvc_clsfctn_type_cd='5' – CORF

Description

- While CORFs and ORFs use institutional claims, they are paid for their services under the physician fee schedule, so the standardization methodology is the same in concept as that for physician services; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names) and where there may be policy differences in adjustments made for institutional claims vs. non-institutional claims (e.g. adjustment in 2011 for multiple therapy services). However, for services provided on or after 1/1/11, if the units on a revenue center line are greater than 100, the standardized amount is determined as if units were equal to 1.
- For any revenue center lines that do not match, the standardized allowed amount is equal to the actual allowed amount.

Community Mental Health Center (CMHC)

Claims included

<code>NCH_CLM_TYPE_CD</code> = 40 and <code>clm_fac_type_cd</code>='7' and <code>clm_srvc_clsfctn_type_cd</code>='6'

Description

CMHCs are paid for their services under the OPD fee schedule, so the standardization methodology is that described below for Hospital outpatient services.

Sources

See Hospital Outpatient

Renal Dialysis Facility

Claims included

<code>NCH_CLM_TYPE_CD</code> = 40 and <code>clm_fac_type_cd</code>='7' and
<code>clm_srvc_clsfctn_type_cd</code>='2'

Description

In general, the standardization methodology works back from the paid amount of the revenue center line.

For 2007 – 2010:
- For dialysis revenue center codes, we start with the payment amount, subtract out the training payment (if applicable), add back in the cost-sharing, divide by the wage index, then add back the training payment.
- For other revenue center lines that include drugs, we use the amount allowed.
- For revenue center lines for lab services, we follow the lab rules described elsewhere in this document.

For 2011 and later, our methodology assumes payment under the new payment system where all drugs and lab services previously paid separately are now bundled.
- For dialysis revenue center codes, we start with the payment amount, subtract any claim outlier payment, subtract out a 100% wage adjusted training payment (if applicable), add back in the cost-sharing, divide by the wage index, then add back the unadjusted training payment and outlier payment.
- Any other revenue center lines are ignored since they are included in the rate.

Formula

For 2007 – 2010

Based on dialysis revenue center lines:

$Standardized\ Allowed =$

$$\frac{(Actual\ payment + \text{wage\_adj\_coinsurance}) - Training\ payment + \ Deductible}{(OPD\ Labor\ Share\ x\ Wage\ Index) + (1 - OPD\ Labor\ Share)}$$

$$+ Training\ payment$$

For drug revenue center lines:

Standardized Allowed = actual payment + Coinsurance & deductible for rev center line

For clinical lab revenue center lines, the standardization methodology is the same in concept as that for clinical labs services; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names).

For 2011

Based on the total of dialysis revenue center lines payments on a claim:

Standardized Allowed =

$$\left\{ \frac{dialysis\ total - outlier - (training\ rate \times wage\ index \times number\ of\ training\ lines) + \ Deductible + Coinsurance}{(ESRD\ Labor\ Share\ x\ Wage\ Index) + (1 - ESRD\ Labor\ Share)} + outlier \right.$$
$$\left. + (training\ rate\ \times number\ of\ training\ lines) \right\}$$

Ignore all other revenue center lines.

Sources

- Training revenue center line: line with a revenue center dialysis code and condition code 73.
- Revenue center codes are found in `REV_CNTR` – the following codes indicate dialysis prior to 2011 - 821, 831, 841, 851, 880, 881 – Starting in 2011, 880 is no longer recognized
- Prior to 2011, a training payment was applicable in the presence of certain revenue center dialysis codes and condition code 73 on the revenue center line. The payment varied by dialysis code:
    - $20 for 821, 831, 851
    - $12 for 841
- Starting in 2011, a fully wage-adjusted training payment was applicable in the presence of any revenue center dialysis codes and condition code 73 on the revenue center line. The national training rate was $33.44.
- Starting in 2011, any claim outlier payments are shown in `value code` = 17.
- Wage index is determined based on `PROVIDER_ID.` The CBSA of the provider is based on the listed CBSA in the OSCAR provider database and is used to determine the associated wage index from the ESRD wage index crosswalk from the ESRD pricer. If the CBSA of a provider cannot be determined, a wage index of 1.0 would be used.
- Coinsurance is `Revenue Center Coinsurance/Wage Adjusted Coinsurance Amount.`
- Deductible from the claim is `REV_CNTR_CASH_DDCTBL_AMT`.
- Provider Payment is `Rev_centr_prvdr_pmt_amt`.

Hospital Outpatient Prospective Payment System

Claims included

NCH_CLM_TYPE_CD = 40 and

clm_fac_type_cd='1' and clm_srvc_clsfctn_type_cd='3'

In general – standardization method for Hospital Outpatient claims is the same for Maryland hospitals and non-Maryland hospitals. Although Maryland hospitals are not paid under the OPPS system, their claims are standardized the same way as other hospitals in order to allow for uniform national standardization. This facilitates national resource use comparisons. The standardized amount for a particular revenue center line depends on whether it is for a service paid for:

- o on reasonable cost or pass-through basis
- o under the outpatient department (OPD) PPS; or
- o under another fee schedule

Any outlier payments on the claim are adjusted for differences in wage costs using the OPPS wage index.

Specifically

- Reasonable costs or pass-through revenue center lines are identified by status indicator (rev_cntr_stus_ind_cd on the claim) equal to:

  - o F – Corneal Tissue acquisition, certain CRNA services and Hepatitis B vaccines
  - o G - Drug/biological pass-through
  - o H - Device or Therapeutic Radiopharmaceuticals pass-through
  - o L – Influenza or Pneumococcal Pneumonia vaccines
- Revenue center lines paid under the OPD fee schedule have an APC or are packaged into an APC and have an "N" payment status indicator.
  - o The standardization methodology looks for the revenue center lines with APCs. Within this category, revenue center lines with a "T" or "X" status indicator may require special treatment as described below.
  - o For revenue center lines with the "N" indicator, the actual payment (always $0) is the standardized payment amount.
- Revenue center lines with an "A" payment status indicator are paid under a different fee schedule or payment system.
- The dollar amount on any revenue center line that can't be matched to a fee schedule will be treated as the standardized amount.
- The outlier amount from the claim is taken and adjusted for differences in wages.

- Because Maryland claims do not have status indicators that indicate OPPS payment, for these claims we search for the HCPCS code sequentially in the APC payment file, the lab fee schedule, and other fee schedules (the same methodology described below for status indicator "A").

1) Revenue center lines for reasonable costs or pass-through services

Description

The standardized amount is the same as the actual payment amount on the line.

Formula

Standardized Allowed = Actual payment + Coinsurance & deductible for rev center line

Sources

- Actual payment amount is `Revenue Center Provider Payment Amount.`
- Deductible from the claim is `REV_CNTR_CASH_DDCTBL_AMT`.
- Coinsurance is `Revenue Center Coinsurance/Wage Adjusted Coinsurance Amount.`
- Payment status indicators are `rev_cntr_stus_ind_cd.`

2) Revenue center lines with an Ambulatory Payment Classification (APC)

Description

- For revenue center lines with an (APC) and a "T" payment status indicator, we work back from the actual payment to determine the standardized amount.
- For revenue center lines with an APC and a "X" payment status indicator, the standardized allowed amount will equal the actual payment amount, plus applicable cost-sharing, for the line when the APC is 0310, 0344, 0366, 0369, 0031, 0368, 0317, 0272, 0263, 0261, 0624 or 0260 and units greater than 1.
- For all other revenue center lines with an APC, the standardized amount is equal to the OPPS schedule; except, in the case of reduced[1] or discontinued[2] procedures, we follow the payment rule.

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[1] Procedures for which anesthesia is not planned that are discontinued after the patient is prepared and taken to the room where the procedure is to be performed.

[2] Procedures for which anesthesia is planned that are discontinued after the patient is prepared and taken to the room where the procedure is to be performed but before they receive anesthesia.

- Claims with modifier FB receive payment reduced by the full device offset amount while those with modifier FC are reduced by half the offset amount.

Formulas

For revenue center lines with an APC and a "T" payment status indicator:

Standardized Allowed =

$$\frac{(\frac{1}{coinsurance\ adjustment\ factor} \times Actual\ payment) + \ Deductible}{(OPD\ Labor\ Share\ x\ Wage\ Index) + (1 - OPD\ Labor\ Share)}$$

If there is a national unadjusted copayment for the service, coinsurance adjustment factor =

$$\left(1 - \frac{National\ unadjusted\ copayment)}{APC\ fee\ schedule\ amount}\right)$$

If there is no national unadjusted copayment for the service, coinsurance adjustment factor =

$$\left(1 - \frac{Minimum\ unadjusted\ copayment)}{APC\ fee\ schedule\ amount}\right)$$

If the neither a national unadjusted copayment or minimum unadjusted copayment can be found for the APC, the coinsurance adjustment factor is = 0.8

For revenue center lines with: an APC of 310, 344, 366, 369, 31, 368, 317, 272, 263, 261, 624 or 260; a "X" payment status indicator; and units greater than 1:

Standardized Allowed = the actual payment + coinsurance & deductible for rev center line

For all other revenue center lines with an APC that can be linked to the OPD fee schedule:

In general, Standardized Allowed =

$$\left((APC\ fee\ schedule\ amount - device\ credit, if\ applicable) \times units\right)$$

If modifier=52 or 73, then Standardized Allowed =

$$(APC\ fee\ schedule\ amount - device\ credit, if\ applicable)\ \times\ \frac{0.5}{units}$$

For all other revenue center lines with an APC that cannot be linked to the OPD fee schedule:

Standardized Allowed = the actual payment + coinsurance & deductible for rev center line

Sources

- APC is characters 2 through 5 of `rev_cntr_apc_hipps_cd`.
- Payment status indicators are `rev_cntr_stus_ind_cd`.
- Reduced procedures are indicated by `Modifier_Cd` equals 52.
- Discontinued procedures are indicated by `Modifier_Cd` equals 73.
- Units is `rev_cntr_unit_cnt`.
- The national unadjusted copayment and the minimum unadjusted copayment come from the OPD PPS fee schedule.
- Deductible from the claim is `REV_CNTR_CASH_DDCTBL_AMT`.
- Coinsurance is `Revenue Center Coinsurance/Wage Adjusted Coinsurance Amount`.
- Wage index is determined by looking up the OPD PPS wage index from the relevant year's regulation for the provider ID on the claim (`PROVIDER_ID`).
- The device reduction is equal to the full offset amount in the presence of modifier code FB and half the offset amount in the presence of modifier code FC.

3) Revenue center lines with "A" Payment Status Indicator

Description

We attempt to match the HCPC on the revenue center line to the various Part B fee schedules in this order: lab fee schedule, physician fee schedule, ambulance fee schedule & DMEPOS fee schedules (for Maryland and Critical Access Hospital claims, we start with the OPPS fee schedule, and then search the rest in this order). The standardization methodology is the same in concept as that for the matching fee schedule; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names) and where there may be policy differences in adjustments made for institutional claims vs. non-institutional claims (e.g. adjustment after 2011

for multiple therapy services). If the HCPC cannot be matched, the standardized amount is equal to the actual amount paid plus the deductible and coinsurance on the revenue center line.

Sources

- The relevant fee schedule is determined by the procedure on the revenue center line (`HCPCS_CD`) and, in the case of lab and physician services, any modifiers (`MOD`).

4) Outlier payments

Description

- The outlier amount is on the claim rather than a revenue center line. Any outlier amounts are adjusted to remove the effect of the wage index

Formula

$Standardized\ Allowed =$

$$\frac{Outlier\ Payment}{(Labor\ Share\ x\ Wage\ Index) + Non\ Labor\ Share}$$

Sources

- The outlier payment from `CLM_VAL_AMT` on the claim when `VAL_CD` = 17.
- Wage index is determined by looking up the OPD PPS wage index from the relevant year's regulation for the provider ID on the claim (`PROVIDER_ID`).
- The labor share is taken from the relevant year's regulation. It has stayed 0.6 for many years.

Critical Access Hospital – Hospital Outpatient Services

`NCH_CLM_TYPE_CD` $= 40$

Substr(`PROVIDER_ID,3,2`) $= 13$ and

`clm_fac_type_cd`='8' and `clm_srvc_clsfctn_type_cd`='5'

Description

The standardized amount is calculated in the same way as the Hospital Outpatient Prospective Payment System methodology described above. Since APCs are not listed on CAH claims, we use the crosswalk from HCPCS_CD to APC from the CMS website.

Services Provided By Hospitals to Inpatients without Part A Coverage or With Exhausted Part A Coverage

Claims included

NCH_CLM_TYPE_CD = 40 and

clm_fac_type_cd='1'and clm_srvc_clsfctn_type_cd='2'

Description – Standardization follows the rule described above for other outpatient services.

Services Provided By Hospitals to "Non-Patients"

Claims included

NCH_CLM_TYPE_CD = 40 and

clm_fac_type_cd='1' and clm_srvc_clsfctn_type_cd='4'

Description – We first try to match the HCPC on the revenue center line to the lab fee schedule. For matching lines, the standardization methodology is the same in concept as that for clinical labs services; differences result from using institutional claims rather than non-institutional claims (e.g., revenue center lines vs. claim lines, variables that are the same in concept have different names). For all other revenue center lines, the standardized allowed = actual payment plus **c**oinsurance & deductible for rev center line.

Other Claim Type 40 Services

Claims included

NCH_CLM_TYPE_CD = 40 and

- clm_fac_type_cd='8' and clm_srvc_clsfctn_type_cd='3'

Description – the standardized amount equals the actual claim amount plus coinsurance & deductible for rev center line.

Physician Services

Claims included

All Part B non-institutional claims that have HCPCS_CD listed in the appropriate fee schedule (described below)

In general – standardization method for physician services depends on whether the claim is for anesthesia or for other physician services.

Specifically

- Anesthesia claims are identified by having HCPCS_CD listed on the anesthesia base unit schedule published on the CMS website.
- Physician claims are identified by HCPCS_CD listed on the Medicare Physician Fee Schedule (MPFS) with positive RVU amounts.

1) Claims for Anesthesia services

Description
- The standardized amount is built up from the conversion factor multiplied by the sum of the relevant base units + the additional 15 minute time units indicated on the claim. In the presence of modifier code AD, base units are limited to a maximum of 4.

For multiple procedures or if the service is provided by a CRNA, the amount above is cut in half.

Formula

For HCPCs that can be matched to fee schedule

Standardized Allowed =

$$conversion\ factor\ \times \left(base\ units + \frac{units}{10, if\ applicable} \right)$$
$$\times\ 0.5\ (multiple\ procedure\ or\ CNRA\ adjustment, if\ applicable)$$

Sources

- Anesthesia conversion factor taken from the relevant year's regulation.
- Applicable base units taken from CMS table for the relevant year
- Unit count provided on the claim = `CARR_LINE_MTUS_CNT.` For claims submitted before July 2009, the units are divided by 10.

- For Multiple procedures `Modifier_Cd` = QK
- For CRNA procedures `Modifier_Cd` = QX or QY

2) All other Physician services

Description
- In general, the standardized amount is built up from the conversion factor multiplied by the sum of the (the relevant work RVUs * Adjuster (if applicable in year) + transitioned practice expense RVUs + malpractice RVUs).
- Some HCPCs are subject to special rule as indicated by a special column on the physician fee schedule file
    - The Diagnostic Imaging Family Indicator column creates 11 "families" of imaging codes prior to 2011 and only 1 family after 2011. In the case of multiple claims lines for imaging in the same family on the same day for the same beneficiary, the highest paid technical component line item is unaffected while the technical component of all other line items is multiplied by 0.5 (for services furnished before 7/1/2010, 0.75). In making this determination for a global code (no TC modifier), the adjustment would be made to the TC portion of the global code. After 1/1/2012, the same reduction method is applied to the professional components. All professional components except the highest paid are multiplied by 0.75.
    - The Bilateral Surgery column indicates whether a code is subject to the reduction for bilateral surgery. For a code with a value of "1", in the presence of modifier "50" payments are multiplied by 1.5. For two of the same code with a value of "1", in the presence of RT & LT modifiers, the RT service is left unchanged, while the LT service is multiplied by 0.5.
    - The Endo Base column, in combination with the Multiple Procedures column, creates 31 "families" of endoscopic procedure codes. In the case of multiple claims lines for endoscopic procedures in the same family on the same day for the same beneficiary, the highest paid line item is unaffected while the payment amount for all other line items is reduced by the value of the base procedure. In making this comparison, bilateral endoscopic procedures are treated as a single procedure at the reduced payment amount. If a bilateral endoscopic procedure is reduced, it is reduced by 150% of the value of the base procedure.
    - The multiple procedures column indicates whether a code is subject to the reduction for multiple procedures or therapy services.
        - For codes with a value of "2" or "3", in the presence of modifier "51" payments are multiplied by 0.5.
        - In 2011 and later, on when a beneficiary has multiple non-institutional services on the same day with a multiple procedures value of "5" (therapy reduction), all practice expense RVUs except for the most expensive service are multiplied by 0.8.
        - In 2011 and later, on institutional Part B claims for multiple revenue center lines with **both** revenue codes 042x, 043x or 44x and HCPCs with a multiple

procedure value of "5", all practice expense RVUs except for the most expensive service are multiplied by 0.75.

- o The Co-surgery column indicates whether a code is subject to the reduction for co-surgery. For codes with a value of "1" or "2", in the presence of modifier "62" payments are multiplied by 0.625.
- o The Assistant at Surgery column indicates whether a code is subject to the reduction for assistants at surgery. For codes with a value of "0" or "2", in the presence of a type of service code 8 (assistant as surgery) payments are multiplied by 0.16.
- o If there is a "C" in the Status Code column, the service is priced by our contractor and there are no national fee schedule values. For these services and other services without RVU values, the standardized allowed is equal to the actual payment plus deductible and coinsurance as described in the All other Carrier Claims section.

- The above amount is also adjusted in the case of physicians sharing a global fee or if provided by PAs, NPs, CNS, Registered Dietitian/Nutritionists, Certified Nurse Midwives or, CSWs.

Formula

For Claim lines with HCPCs/modifier combination that can be matched to the physician fees schedule and where the physician fee schedule payment amount is greater than zero.

Initial Allowed Standardized payment =

$$Conversion\ factor \times (Work\ RVUs \times adjuster, if\ applicable + Transitioned\ Practice\ Expense\ RVUs + Malpractice\ RVUs)$$

The initial allowed standardized payment is adjusted to produce an adjusted allowed standardized amount as follows:

- In the case of multiple line items for imaging in the same family for the same beneficiary on the same day, the highest TC component is unaffected. For global codes, the TC component is used, while for codes with the TC modifier, the total allowed amount is used. For all line items other than the highest paid:
  - o The allowed amount is multiplied by 0.5 (for services furnished before 7/1/2010, 0.75)
- In the case of multiple claim lines for imaging in the same family for the same beneficiary on the same day, the highest professional component (PC) is unaffected. Again, for global codes, the PC component is used, while for codes with the 26 modifier, the total allowed amount is used. After 1/1/2012, for all line items other than the highest paid:
  - o The total allowed amount is multiplied by 0.75.

- In the case of claims lines for HCPC subject to the bilateral surgery reduction policy, either the LT line item is multiplied by 0.5 (2 of the same code with RT & LT modifiers) or the line item is multiplied by 1.5 (1 code with 50 modifier).
- In the case of multiple claims line for endoscopic procedure in the same family on the same day for the same beneficiary, the highest paid line item is unaffected while the payment amount for all other line items is reduced by the value of the base procedure (resulting value cannot be negative). In making this comparison, bilateral endoscopic procedures are treated as a single procedure at the reduced payment amount. If a bilateral endoscopic procedure is reduced, it is reduced by 150% of the value of the base procedure.
- In the case of claims lines for HCPC subject to the multiple procedures reduction policy all line items are multiplied by 0.5.
- In the case of claims lines for HCPC subject to the co-surgery reduction policy all line items are multiplied by 0.625.
- In the case of claims lines for HCPC subject to the assistants at surgery reduction policy all line items are multiplied by 0.16.
- In the case of physicians sharing a global fee the payment amount is multiplied by the applicable percentage the HCPC according to the modifier on the claim.
- In the case of services provided by PA, NP, CNS, RD/N, all line items are multiplied by 0.85 (reduction does not apply to technical components or technical component only services).
- In the case of services provided by CSW, all line items are multiplied by 0.75.
- For claims provided by midwives before 2011, all line items are multiplied by 0.65.
- Starting in 2011, in the case of multiple claims line for therapy services on the same claim, the highest paid line item in term of practice expense is unaffected while the practice expense for all other line items is multiplied by 0.8 (non-institutional claim) or 0.75 (institutional Part B claims).
- For claims from 2007 or 2008, the Work RVUs are multiplied by 0.8994 or 0.8806, respectively. Other years have no adjustment.

The final step in the calculation is to account for number of units:

Standardized Allowed =
$$Adjusted\ allowed\ standardized\ amount \times Units$$

Sources

o Conversion factors are taken from the relevant year's physician fee schedule file.
o RVUs determined from the physician fee schedule file based on the combination of claim line HCPC and MOD. Modifiers include:
  o 53 – discontinued procedure
  o 26 – professional component
  o TC – technical component

However, for the TC of imaging services (including the TC part of a global service), the RVUs used are the lower of those in the physician fee schedule or OPPS fee schedule "caps". These OPPS "RVUs" are in columns of the physician fee schedule file ("Non-facility PE used for OPPS payment amount", "Facility PE used for OPPS payment amount" and "MP used for OPPS payment amount").

- The facility value of the practice expense RVUs is used if `LINE_PLACE_OF_SRVC_CD` equals:
    - 21 - Inpatient Hospital
    - 22 - Outpatient Hospital
    - 23 - Emergency Room-Hospital
    - 24 - Ambulatory Surgical Center
    - 26 - Military Treatment Facility
    - 31 - Skilled Nursing Facility
    - 34 - Hospice
    - 41 - Ambulance—Land
    - 42 - Ambulance—Air or Water
    - 51 - Inpatient Psychiatric Facility
    - 52 - Psychiatric Facility-Partial Hospitalization
    - 53 - Community Mental Health Center
    - 56 - Psychiatric Residential Treatment Center
    - 61 - Comprehensive Inpatient Rehabilitation Facility
- To determine the HCPCs subject to the imaging families' reduction, we look to the Diagnostic Imaging Family Indicator column on the physician fee schedule file. There are 11 imaging "families" as indicated by codes "1" through "11" in that column prior to 2011 and only 1 family in 2011.
- To determine the whether a line item is subject to the bilateral surgery reduction, we look for HCPCs with a "1" in the bilateral surgery (bilat surg) column on the physician fee schedule file and either `Modifier_Cd` = 50 on a single line or `Modifier_Cd` = LT & RT on two lines with the same code.
- To determine the HCPCs subject to the multiple related endoscopic procedure reduction, we look for a "3" in the Multiple Procedures (mult proc) column of the physician fee schedule. Families are determined based on identical HCPCs in the Endo Base column. There are 31 "families". The reduction amount is equal to the value of the HCPC in the ENDO Base column (or 150% in the case of a bilateral endoscopic procedure).

- To determine the HCPCs subject to the multiple procedure reduction, we look for a "2" or "3" in the Multiple Procedures (mult proc) column of the physician fee schedule and `Modifier_Cd` = 51.

- To determine the whether a line item is subject to the assistant at surgery reduction, we look for HCPCs with a "0" or "2" in the assistant at surgery (asst surg) column on the physician fee schedule file and type of service code 8 `line_cms_type_srvc_cd` (assistant at surgery).

- To determine the whether a line item is subject to the co-surgery reduction, we look for HCPCs with a "1" or "2" in the co-surgery (co-surg) column on the physician fee schedule file and a `Modifier_Cd` = 62.
- The presence of `Modifier_Cd` = 56, 54 or 55 indicate that the physician is sharing a global fee. The factor to be applied to the payment amount for the HCPC comes from one of three columns in the physician fee schedule file.
  - For 56 the Pre Op column is used
  - For 54 the Intra Op column is used
  - For 55 the Post Op column is used
- For PAs - `PRVDR_SPCLTY_CD` equals 97
- For NPs - `PRVDR_SPCLTY_CD` equals 50
- For CNS - `PRVDR_SPCLTY_CD` equals 89
- Registered Dietitian/Nutritionists - `PRVDR_SPCLTY_CD` equals 71
- Certified Nurse Midwives - `PRVDR_SPCLTY_CD` equals 42
- CSW - `PRVDR_SPCLTY_CD` equals 80
- To determine the HCPCs subject to the multiple therapy services reduction, we look for a "5" in the Multiple Procedures (mult proc) column of the physician fee schedule.
- Units are found in the `SRVC_CNT`.
- Applicable deductible is `LINE_BENE_PTB_DDCTBL_AMT`
- Coinsurance amount on the claim is `LINE_COINSRNC_AMT`
- Allowed charge indicated on the claim is `LINE_ALOWD_CHRG_AMT`

Ambulatory Surgical Center (ASC)

Claims included

All Part B non-institutional claims with `CARR_LINE_TYPE_SRVC_CD` = F or both place of service equal to 24 and specialty code equal to 49.

Description

- The standardized amount is generally equal to ASC fee schedule amount relevant to the service provided.
- In the case of multiple procedures, and reduced or discontinued procedures, we follow the payment rule and reduce the standardized amount by ½.
- Claims with modifier FB receive a payment reduction worth the full device offset amount while those with modifier FC are reduced by half the offset amount.

Formula

Standardized Allowed =

$$(ASC\ fee\ schedule\ amount - device\ reduction, if\ applicable) \times Units \\ \times Adjustment\ factor, if\ applicable$$

Where adjustment factor = 0.5 if the status or modifier code indicates multiple procedures or reduced or discontinued procedures, and the device reduction is subject to the presence of either modifier FB or FC.

Sources

- The fee schedule amount is determined by the procedure on the claim line (`HCPCS_CD`).
- Multiple services are indicated by `Modifier_Cd` equals 51.
- Reduced procedures are indicated by `Modifier_Cd` equals 52.
- Discontinued procedures are indicated by `Modifier_Cd` equals 73.
- Device reduction amounts are taken from the CMS website ASC section
- Units are from `line_srvc_cnt`.

Durable Medical Equipment (DME)

Claims included

All Part B non-institutional claims with HCPCS code on the DMEPOS fee schedule with positive payment amount, and the CATG column not equal to PO or TS (these are handled in the Prosthetics, Orthotics and Surgical Supplies section)

In general – standardization method for DME depends on the modifier used along with the HCPCS on the claim line. The payment for oxygen is taken as is from the claim.

Specifically

- If modifiers MS, RP or RB are used on the claim the standardized amount is the actual claim payment amount plus the coinsurance & deductible for claim line. Oxygen services (CATG column equal to OX) also take the payment from the claim, as these are generally based on a uniform national payment rate. In all other cases, the methodology described below is used.

Description

- The standardized amount is equal to the ceiling of the DME fee schedule relevant to the service provided as indicated by the combination of HCPCS code and modifier.

Formula

Standardized Allowed =

$$DME\ fee\ schedule\ ceiling\ amount\ (or\ average\ across\ states\ if\ no\ ceiling)$$
$$\times\ Adjustment\ factor, if\ applicable \times Units, if\ applicable$$

Adjustment Factors

Time Period Applicable	Type of Products	Modifier Required	Modifier Value Used	Adjustment Factor
Prior to 2011	Power wheel-chairs	NU (purchase option)	Value for RR	10
		UE (used purchase)	Value for RR	7.5
	All DME	KJ with RR	Value for RR	0.75
On or after 1/1/11	Power wheel-chairs	NU (purchase option)	Value for RR	6.67
		UE (used purchase)	Value for RR	5
		KJ with RR	Value for RR	0.4
	All other DME	KJ with RR	Value for RR	0.75
All Time Periods	Oxygen	QE		0.5
All Time Periods	Oxygen	QF,QG		1.5

Sources

- The ceiling value is determined by combination of the HCPCs and modifier on the claim line.
  - HCPCs comes from `HCPCS_CD.`
  - MODs come from `MDFR_CD1` and `MDFR_CD2.`
    - Modifiers that affect payment:
      - If `MDFR_CD1` equals AU, AV, AW, KF, KL, KM, KN, NU, RR or UE; or
      - If `MDFR_CD2` equals BA, KE, KC, KL or KF.
      - Modifiers KH, KI, KJ or MS should be treated as RR.
      - Any other modifiers found on the claims should be ignored.
      - When the FS shows one code as 1st modifier and another as the 2nd modifier, claims should be treated the same if the order of the modifiers is reversed (eg. For E0748 a claim with mod 1=KF and mod 2=NU is treated as if mod 1=NU and Mod 2=KF)
- Units are from `line_srvc_cnt.`

Prosthetics, Orthotics and Surgical Supplies

Claims included

All Part B non-institutional claims with:

- `HCPCS_CD` on the DMEPOS fee schedule and `CATG` column from the DMEPOS fee schedule equals PO or TS.

Description

- The standardized amount is equal to 5/6 of ceiling of the DME fee schedule relevant to the service provided as indicated by the combination of code and modifiers.

Formula

Standardized Allowed =

$$0.833 \times DME\ fee\ schedule\ amount \times Units, if\ applicable$$

Sources

- The ceiling value is determined by combination of the HCPCs and modifier on the claim line
  - HCPCS comes from `HCPCS_CD.`
  - MODs come from `MDFR_CD1` and `MDFR_CD2.`
    - Modifiers that affect payment:
      - If `MDFR_CD1` equals AU, AV, AW, KF, KM, KN, NU, RR or UE; or
      - If `MDFR_CD2` equals KF, KC or BA.
- Units are from `line_srvc_cnt`.

Parenteral and Enteral Nutrition (PEN)

Claims included

All Part B non-institutional claims with a `HCPCS_CD` listed in the national PEN fee schedule.

Description

- The standardized amount is equal to the actual claim payment amount plus the coinsurance & deductible for claim line. This is because PEN is based on a national fee schedule and does not vary by state.

Formula

Standardized Allowed = actual payment + Coinsurance & deductible for claim line

Sources

- Actual claim amount is `line_nch_pmt_amt.`
- Applicable deductible is `LINE_BENE_PTB_DDCTBL_AMT.`
- Coinsurance amount on the claim is `LINE_COINSRNC_AMT.`

Part B Drugs

Claims included

This category is included in the "All other claims" section, which consists of HCPCS_CD not found in any other payment section (such as physician fee schedule, lab, etc.). The payment is taken as is from the claim, since Part B drugs are paid on a uniform national ASP fee schedule.

Description

- The standardized amount is equal to the actual claim payment amount plus the coinsurance & deductible for claim line.

Formula

Standardized Allowed = actual payment + coinsurance & deductible for claim line

Sources

- Actual claim amount is `line_nch_pmt_amt.`
- Applicable deductible is `LINE_BENE_PTB_DDCTBL_AMT.`
- Coinsurance amount on the claim is `LINE_COINSRNC_AMT.`

Clinical Lab Services

Claims included

All Part B non-institutional claims with HCPCS_CD listed on the clinical diagnostic laboratory fee schedule with a positive payment rate.

In general – the standardization method for clinical lab claims depends whether or not the claim is for an automated test or test panel.

1) **Claims for auto tests and panels (HCPCS '82040', '82247', '82248', '82310', '82330', '82374', '82435', '82465', '82550', '82565', '82947', '82977', '83165', '84075', '84100', '84132', '84155', '84295', '84450', '84460', '84478', '84520', '84550', '80047', '80048', '80051', '80053', '80061', '80069', '80076')**

Description

- The standardized amount is equal to the actual claim payment amount plus the coinsurance & deductible for claim line.

Formula

Standardized Allowed = actual payment + coinsurance & deductible for claim line

2) All other lab services with a positive national fee schedule payment amount
Description

The standardized amount is equal to the national limit amount times the number of units.

Formula

Standardized *Allowed* =

$$(National\ Limit \times Units)$$

Sources

- The fee schedule amount is determined by claim line (`HCPCS_CD`).
- The national limit amount comes from the applicable year's fee schedule.
- Units are from `line_srvc_cnt`.

Ambulance

Claims included

All Part B non-institutional claims with `BETOS_CD` = O1A.

In general – Claim lines for mileage and mode of service are treated differently from other ambulance claim lines, though both are standardized to a national mean.

- o Mileage and mode of service claim lines have `HCPCS_CD` equal to A0425, A0435,A0436, A0430, A0431.

1) Claim lines for ambulance mileage

Description

- The standardized amount is equal to the arithmetic mean of the actual allowed claim line amounts for the year for all claims (for all five codes). The rate in 2012 was $102.

Formula

Standardized Allowed = National mean of allowed amounts

Sources

- Allowed charge indicated on the claim is `LINE_ALOWD_CHRG_AMT`

2) Other ambulance claims

Description
- The standardized amount is generally equal to the arithmetic mean of the actual allowed claim line amounts for the year for the relevant HCPC.

Formula

Standardized payment = National mean of allowed amount

Sources

- The fee schedule amount is determined by claim line (`HCPCS_CD`).
- Allowed charge indicated on the claim is `LINE_ALOWD_CHRG_AMT`

All Other Carrier Claims

Claims included

All Part B non-institutional claims not included in any other payment section (e.g. physician fee schedule, lab, etc.). This category consists of Part B drugs and carrier priced services.

Description

- The standardized amount is equal to the actual claim payment amount plus the coinsurance & deductible for claim line.

Formula

Standardized Allowed = actual payment + coinsurance & deductible for claim line

Sources

- Actual payment amount is `line_nch_pmt_amt.`
- Applicable deductible is `LINE_BENE_PTB_DDCTBL_AMT.`
- Coinsurance amount on the claim is `LINE_COINSRNC_AMT.`

Appendix: Changes to CMS's Price Standardization Methodology

This appendix notes the differences between the up-to-date price standardization methodology used by the Centers for Medicare and Medicaid Services (CMS) presented in this document and the "CMS Price Standardization" document posted on 1/31/12.

Methodological changes to the CMS price standardization methodology appear on the following pages:

1. **Pages 6-13**: Inpatient Critical Access Hospital (CAH), cancer hospitals and Maryland hospital claims standardizations were updated to follow the Inpatient Prospective Payment System (IPPS) methodology. The IPPS standardizes claims using a DRG-specific weight and adjusts for short-stay transfers and post-acute discharges (for certain MS-DRGs) when appropriate. Previously, Maryland claims were standardized by multiplying the actual payment by a hospital-specific IME and DSH factor and adjusting for the hospital wage index. CAH and cancer hospital claims were standardized by adjusting the actual payment for the hospital wage index. This change makes CAHs, cancer hospitals, and Maryland hospitals comparable to IPPS hospitals.

2. **Pages 6-20**: Hospital standardized amounts are now reduced by any device offset reduction present on the claim. These amounts are found in value code FD.

3. **Page 29**: Hospice claims standardization for services performed by a physician or nurse practitioner is now standardized according to the physician fee schedule instead of actual payment.

4. **Pages 37-42**: Outpatient CAH and Maryland claims standardizations were updated to follow the outpatient prospective payment system (OPPS) methodology. Outpatient claims are standardized differently depending on whether the service is paid for 1) on a reasonable-cost or pass-through basis 2) under the OPPS or 3) under another fee schedule. Previously, Maryland claims were standardized by multiplying the actual payment by a hospital-specific IME factor and adjusting for the hospital wage index. CAH claims were standardized by adjusting the actual payment for the hospital wage index.

5. **Pages 43-44**: Standardization of services for beneficiaries without Part A or with Exhausted Part A coverage and Services for "Non-Patients" no longer differentiates between claims at CAH/Maryland hospitals vs. other hospitals.

6. **Page 47**: For 2012 and beyond, the Diagnostic Imaging reduction is now also applied to the professional component (25% reduction)

7. **Page 52**: ASC fee schedule amounts are now reduced by the device offset amount in the presence of modifier codes FB or FC

8. **Page 58**: For all automated lab test and panel test codes, the claim payment is taken as the standardized payment. Previously, only panel codes were standardized in this manner.

9. **Page 61**: Ambulance mileage amounts are standardized to the national arithmetic mean of allowed claim lines for all 5 codes now, instead of just the three mileage codes. The codes for helicopter and fixed wing transportation were added to the list, in order to price ambulance services similarly regardless of the mode of transportation

Non-methodological changes were also made. Typographical errors were corrected and acronyms were spelled out throughout this document.