

2011 National Health Insurer Report Card: Statement of methodology, including step-by-step guidance

Introduction

The purpose of the American Medical Association's (AMA) National Health Insurer Report Card (NHIRC) is to provide physicians and the general public a reliable and defensible source of critical metrics concerning the timeliness, transparency and accuracy of claims processing by the health insurance companies that are responsible for paying the majority of claims each year in the U.S. health care system.¹ This report card includes results for Medicare and seven commercial health insurers (payers). The results will be used to identify opportunities to improve the overall efficiency of billing and collections and reduce the cost of doing business between physicians and payers. To accomplish this task, the AMA used its best efforts to ensure that the methodologies employed are sound and defensible and the process is transparent, such that all interested parties are able to understand and duplicate the study.

Health insurer (i.e., payer) selection

Selection of payers was based on their national reach as evidenced by their large numbers of national commercial enrollees. Medicare and the following seven commercial payers were selected for this report card. For purposes of selecting data, the payer was identified from the payer name field in the electronic remittance advice (ERA).²

- Aetna
- Anthem Blue Cross and Blue Shield (BCBS)
- CIGNA Corp.
- Health Care Services Corporation (HCSC)
- Humana Inc.
- The Regence Group
- UnitedHealthcare (UHC)

¹ The NHIRC was developed in cooperation with National Healthcare Exchange Services, Inc. (NHXS) and the Frank Cohen Group, LLC.

² See the next section ("Data source") for a description of ERA.

Data source

The AMA's 2011 NHIRC reported 17 metrics concerning the timeliness, cash flow, accuracy, administrative requirements, claim edits, denials and improvement of claims processing by some of the largest health insurance companies in the U. S. These metrics can be divided into seven focus areas.³ Data for all metrics, excluding metrics 15-17 which were self reported by the payers, was provided by National Healthcare Exchange Services, Inc. (NHXS), headquartered in Sacramento, CA. NHXS is an application service provider that provides contract compliance and denial management solutions that lower the cost of doing business between physicians and payers. The data provided by NHXS for the 2011 NHIRC included approximately 3.98 million services billed on approximately 2.4 million claims with dates of service (DOS) between Feb. 1, 2011 and Mar. 31, 2011. More than 16,000 practicing physicians in more than 400 practices across 42 states representing 80 specialties contributed to the data. For each metric that required calculation, when possible, data were extracted from fields in the standard transactions based on the federally mandated Health Insurance Portability and Accountability Act of 1996 (HIPAA) standard transactions. The technical references for these transactions are the electronic claim submission (HIPAA ASC X12N 837 Health Care Claim—professional transactions) and the electronic remittance advice (ERA) (HIPAA ASC X12N 835 Health Care Claim Payment/Advice Transaction), which the payer submits to a physician in response to the receipt of an electronic claim submission.⁴

For certain metrics, other data were used and will be noted at the appropriate point in this document. For each metric, the form(s) and field(s) from which the data were extracted will be referenced.

The results for all the above-mentioned metrics are grouped by payer. The Payer Name (ASC X12 835: N102) was used to assign data to the correct payer, and a claim line identification (ID) number was provided by NHXS to allow matching of the service-level information on the electronic claim submission to the service-level information on the ERA.

The seventh focus area results, Improvement of the Claims Cycle Workflow section which includes metrics 16 and 17, were self reported by the payers on a survey sent to the payers on Mar. 21, 2011. Metric 15 results were taken directly from the Council for Affordable Quality Healthcare (CAQH), which facilitates the Committee on Operating Rules for Information Exchange (CORE).⁵

File preparation and sample size

For the purpose of this study, NHXS provided a file in which each record contained the service-level information on the electronic claim submission and the matching service-level information on the ERA. The sample of records from the NHXS master database provided on the universe were billed to payers by physicians representing most specialties for dates of service between Feb. 1, 2011 and Mar. 31, 2011 and for which an ERA was dated no later than Apr. 24, 2011.⁶ Header-level data from the electronic claim submission and ERA were added to each record. A record in the NHXS data is referred to as a claim line. Each claim line has a Claim Line ID number to associate claims with multiple claim lines.

The definitions below will add clarity when referencing each sample set identified in this document.

The **master database** (table 1, row 1, rows imported from NHXS) for the 2011 NHIRC included 100 percent of all claim lines recorded in the NHXS database for the eight payers included in this study. This database consisted of approximately 3.98 million services with DOS between Feb. 1, 2011 and Mar. 31, 2011. The master database for each category, such as payment timeliness, and for each payer can be found in Table 1. For example, the payment timeliness category pulled its results from a sample frame of 3,986,245 claim lines, unless otherwise indicated.

The **filtered claim lines** (Table 1, row 2, filtered claim lines) consists of the excluded or removed claim lines when the identified filters were applied in the analysis. The filtered claim lines for each category, such as payment timeliness, and

³ The seven focus areas (and the corresponding metric numbers on the report card) are: a) Payment Timeliness (1–2); b) Cash Flow (2A–3A); c) Accuracy (4–6); d) Administrative Requirements (7); e) Claim Edit Sources and Frequency (8–10B); f) Denials (11–14) and g) Improvement of Claims Cycle Workflow (15–17).

⁴ The X12N 835 Health Care Claim Payment/Advice (ERA) and the ASC X12N 837 Health Care Claim: Professional Electronic Data Interchange Transaction Set Implementation Guides are available for purchase at www.wpc-edi.com.

⁵ Visit the CORE Web site at www.caqh.org/CORE_step_by_step.php for more information regarding CORE certification.

⁶ 80 specialties' including: Anesthesiology, Dermatology, Emergency Medicine, Family Medicine, Internal Medicine, Multispecialty, Neurosurgery, Ophthalmology, Orthopedic Surgery, Pathology, Pediatrics, Radiology, Surgery and Transplant Surgery..

for each payer can be found in Table 1. For example, when the master database was filtered, 1,594,669 claim lines being excluded or removed from the sample for the payment timeliness category.

The **sample frame** (Table 1, row 3) consists of the remaining claim lines used for the analysis. The filtered claim lines for each category, such as payment timeliness, and for each payer can be found in Table 1. For example, the metrics found in the payment timeliness category had final a sample universe that consisted of 2,391,576 claim lines meeting the requirements unless otherwise indicated.

In summary, the methodology to determine the appropriate sample universe for each metric is that we: 1) started with the master database; 2) applied filters as listed in this document to remove claims not meeting the requirements of the metrics in the payment timeliness and type, cash flow, accuracy, administrative requirements, claim edit sources and frequency, and denials focus areas; and then 3) compiled the sample frame for each designated metric.⁷

Table 1 below details the number of claim lines imported by NHXS (universe), the excluded claim lines (filtered claim lines) and the claim lines used for the analysis (sample frame) by payer.

Table 1: Import statistics from NHXS: Sample sizes by payer									
	Aetna	Anthem	CIGNA	HCSC	Humana	Regence	UHC	Medicare	Total
Payment timeliness									
Universe claim lines imported from NHXS	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245
Filtered claim lines (excluded claim lines)	69,264	181,573	36,952	91,565	41,017	3,011	108,649	1,062,638	1,594,669
Sample frame (claim lines used for analysis)	97,701	233,343	57,328	112,179	79,703	7,994	169,257	1,637,071	2,391,576
Cash Flow									
Universe claim lines imported from NHXS	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245
Filtered claim lines (excluded claim lines)	69,264	181,573	36,952	91,565	41,017	3,011	108,649	1,062,638	1,594,669
Sample frame (claim lines used for analysis)	97,701	233,343	57,328	112,179	79,703	7,994	169,257	1,637,071	2,391,576
Accuracy – Contracted rate									
Universe claim lines imported from NHXS	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245
Filtered claim lines (excluded claim lines)	77,770	215,800	41,296	95,831	45,714	5,385	124,263	1,124,213	1,760,272
Sample frame (claim lines used for analysis)	89,195	199,116	52,984	107,913	72,006	5,620	153,643	1,575,496	2,255,973

⁷ Unlike the 2008-2010 methodology, in 2011 we based metrics 1-6 on the entire sample frame.

Accuracy – ERA									
Universe claim lines imported from NHXS	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245
Filtered claim lines (excluded claim lines)	82,133	215,249	44,683	100,922	53,494	5,940	127,160	1,135,225	1,764,836
Sample frame (claim lines used for analysis)	84,832	199,667	49,597	102,822	64,226	5,065	150,746	1,564,454	2,221,409
Administrative requirements									
Universe claim lines imported from NHXS	116,965	414,916	94,280	203,744	117,720	11,005	277,906	2,699,709	3,986,245
Filtered claim lines (excluded claim lines)	40,668	104,869	23,892	50,631	23,836	1,195	67,458	540,473	853,742
Sample frame (claim lines used for analysis)	126,297	310,047	70,388	153,113	93,884	9,090	210,448	2,159,236	3,132,503
Denials									
Universe claim lines imported from NHXS	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245
Filtered claim lines (excluded claim lines)	0	0	0	0	0	0	0	0	0
Sample frame (claim lines used for analysis)	166,965	414,916	94,280	203,744	117,720	11,005	277,906	2,669,709	3,986,245

Payment timeliness

Sample size and stratification

For the payment timeliness first remittance response time analyses, the following filters as specified under each metric were applied to the universe. Based on this criteria, there were 3,986,245 records in the universe containing the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. The sample frame containing 2,391,576 claim lines was used to determine metric results for the metrics specified below.

Metric 1: Payer claim received date disclosed

Description: What percentage of time does the payer provide the date it received the claim (payer claim received date) in its electronic remittance advice (ERA) or explanation of benefits (EOB) response to the physician?

This metric reports the percentage of claim lines with a non-null value in the Payer Claim Received Date (X12 835: DTM02) field.

Calculation: Count of claim lines that reported some value in the received date field divided by the total count of claims lines reported for each payer.

Filters: There were no filters applied.

Data for the Payer Claim Received Date satisfying the following restrictions were extracted from the ASC X12 835

Health Care Claim Payment/Advice (ERA):

- Data were extracted into separate data files for each payer where Payer Name (X12 835: N102) = Payer.
- For each payer, the total number of claim lines with a valid date (Date Time Qualifier [DTM01] = 2-050-DTM **and** where the Payer Claim Received Date [DTM02] is not null) was divided by the total number of claim lines.

Metric 2: First remittance response time (median days)⁸

Description: What is the median time period in days between the date the physician claim was received by the payer and the date the payer produced the first ERA? If a payer did not provide the Payer Claim Received Date, the most current date of service that was reported on the claim was used to perform the calculation. If a payer did not report Payer Claim Received Date, DOS from the matching 837 was used instead.

This metric reports the number of days between the Payer Claim Received Date (X12 835: DTM02) and the Claim Payment Date (X12 835: BPR16) in the first ERA for the claim.

Calculation: Count of claim lines in the sample frame that met the specified criteria divided by the count of all claim lines in the sample frame.

Filters: The following filters were applied in order to create the sample frame:

- Modifier field one is blank or contains CPT modifier TC (technical component), 26 (professional component) or 53 (discontinued procedure)
- Modifier fields two and three are blank
- Payment date is greater than the received date
- Payment amount is greater than zero

The following fields containing non-missing data were extracted from both the ASC X12N 835 Health Care Claim Payment/Advice (ERA) and ASC X12N 837 Health Care Claim: Professional:

- Data were extracted into separate data files for each payer where Payer Name (X12 835: N102) = Payer.
- Payer State Code (X12 835: N402).
- Payer Claim Received Date (X12 835: DTM02) **and** where Date Time Qualifier (X12 835: DTM01) = 2-050-DTM.
- Claim Payment Date (X12 835: BPR16) where the Claim Payment Date was greater than or equal to the Payer Claim Received Date, or DOS when the Payer Claim Received Date was not populated; in cases where the Payer Claim Received Date was not available, DOS was used instead.

⁸ For metrics 2 and 2A, the "date the payer produced the first ERA" and the date considered the "first payment on the claim" are the date the payer reports in the electronic remittance advice as the "Check Issue or EFT Effective Date." The implementation guide for the electronic remittance advice instructs payers to value the "Check Issue or EFT effective date" in three different ways:

- 1) If paying by electronic funds transfer, the date the payment is available to the payee
- 2) If paying by check, the check date.
- 3) If there is no payment being made, the date the remittance advice is sent.

When a payment is made by EFT and the payer follows the instructions in the ERA implementation guide, the timeliness measure will include the payer's estimate of the time the payment will take to reach the payee's bank account. However, when payment is made by check, the time taken to mail the check, for the delivery of the check, and the deposit of the check is not included in the timeliness measure. Payers with higher EFT adoption rates (Metric 3) and/or more conservative approaches to calculating the date EFT payments will be available will be reported as taking longer to make payment than those with lower EFT adoption rates and/or who assume EFT payments are made more quickly. Differences between payers in the reported timeliness metrics may not represent actual differences in the time taken by physicians to receive payment.

- Claim lines when the date in the Claim Received Date (or if not available, DOS) field was subtracted from the date in the Claim Payment Date field for each record was equal to or less than 0.
- DOS (X12 837: DTP03) is not null **and** where Date Time Qualifier (X12 837: DTP01) = 472 where 472 is service, and where **and** where Date Time Period Format Qualifier (X12 837: DTP02) = D8 or RD8, where D8 is the date and RD8 is the date range.⁹
 - All claim lines for each payer that met the criteria was selected.
 - The date in the Claim Received Date (or if not available, DOS) field was subtracted from the date in the Claim Payment Date field for each record in order to obtain the difference in the number of days between the reported dates.
 - The median of the difference in number of days was reported (first remittance response time).

Cash flow

Sample size and stratification

For the cash flow analyses, the following filters as specified under each metric were applied to the universe. Based on these criteria, there were 3,986,245 records in the universe containing the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. The sample frame containing 2,391,576 claim lines was used to determine metric results for the metrics specified below.

The metrics relating to electronic funds transfer (EFT), metrics 3 and 3A, were based on the practices within the sample as the goal was to identify EFT utilization by practice rather than by claim line as well as the percentage of physician practices receiving EFT that also received payments by check from the payer during the analysis period.¹⁰

Metric 2A: Cash flow analysis¹¹

Description: On what percentage of claims was the first payment on the claim received within the following time ranges: 0-15 days, 16-30 days, 31-45 days, 46-60 days and greater than 60 days? This metric does not attempt to quantify the EFT payment lag time where the EFT payment does not accompany the ERA.

The focus of this metric is the number of days between the Payer Claim Received Date (X12 835: DTM02) and the Claim Payment Date (X12 835: BPR16) in the first ERA that contained a payment amount for the claim.

Calculation: The number of days from the received date to the paid date were determined and, depending on the number of days, applied to the specific groupings listed above.

Filters: The following filters were applied in order to create the sample frame.

⁹ This date has been converted to reflect a single date of service.

¹⁰ There were a total number of 80 physician practices within the sample.

¹¹ For metrics 2 and 2A, the "date the payer produced the first ERA" and the date considered the "first payment on the claim" are the date the payer reports in the electronic remittance advice as the "Check Issue or EFT Effective Date." The implementation guide for the electronic remittance advice instructs payers to value the "Check Issue or EFT effective date" in three different ways:

- 1) If paying by electronic funds transfer, the date the payment is available to the payee.
- 2) If paying by check, the check date.
- 3) If there is no payment being made, the date the remittance advice is sent.

When a payment is made by EFT and the payer follows the instructions in the ERA implementation guide, the timeliness measure will include the payer's estimate of the time the payment will take to reach the payee's bank account. However, when payment is made by check, the time taken to mail the check, for the delivery of the check, and the deposit of the check is not included in the timeliness measure. Payers with higher EFT adoption rates (Metric 3) and/or more conservative approaches to calculating the date EFT payments will be available will be reported as taking longer to make payment than those with lower EFT adoption rates and/or who assume EFT payments are made more quickly. Differences between payers in the reported timeliness metrics may not represent actual differences in the time taken by physicians to receive payment.

The following fields containing non-missing data were extracted from both the ASC X12N 835 Health Care Claim Payment/Advice (ERA) and ASC X12N 837 Health Care Claim Professional:

- Data were extracted into separate data files for each payer where Payer Name (X12 835: N102) = Payer.
- Payer State Code (X12 835: N402).
- Payment Method Code (X12 835: BPR04=Automated Clearinghouse [ACH] or Check [CHK]).
- Line Item Provider Payment Amount (X12 835: SVC03>0).
- Payer Claim Received Date (X12 835: DTM02) **and** where Date Time Qualifier (X12 835: DTM01) = 2-050-DTM.
- Claim Payment Date (X12 835: BPR16) where the Claim Payment Date was greater than or equal to the Payer Claim Received Date, or DOS when the Payer Claim Received Date was not populated; in cases where the Payer Claim Received Date was not available, the DOS was used instead.
- DOS (X12 837: DTP03) is not null **and** where Date Time Qualifier (X12 837 DTP01) = 472 where 472 is service; **and** where Date Time Period Format Qualifier (X12 837: DTP02) = D8 or RD8, where D8 is the date and RD8 is the date range¹²:
 - All claim lines for each payer that met the criteria were selected.
 - The date in the Claim Received Date (or if not available, DOS) field was subtracted from the date in the Claim Payment Date field for each record in order to obtain the difference in the number of days between the reported dates.

Metric 2B: Percentage of claim lines paid \$0

Description: What percentage of claim lines are paid \$0 for any reason (e.g. claim edits, denials and patient responsibility)

This metric is calculated by claim line and reports the percentage of claims lines that were filed for which no payment was made by the payer.

Calculation: Count of claim lines where the paid amount was equal to zero divided by the count of all claim lines.

Filters: There were no filters applied to metric 2B.

Data were extracted from the ASC X12N 835 Health Care Claim Payment/Advice (ERA):

- Payer Name (X12 835: N102).
- Line Item Provider Payment Amount (X12 835: SVC03=0).

Metric 3: Electronic funds transfer (EFT) adoption rate¹³

¹² The date has been converted to reflect a single service date.

¹³ For metrics 2 and 2A, the "date the payer produced the first ERA" and the date considered the "first payment on the claim" are the date the payer reports in the electronic remittance advice as the "Check Issue or EFT Effective Date." The implementation guide for the electronic remittance advice instructs payers to value the "Check Issue or EFT effective date" in three different ways:

- 1) If paying by electronic funds transfer, the date the payment is available to the payee.
- 2) If paying by check, the check date.
- 3) If there is no payment being made, the date the remittance advice is sent.

When a payment is made by EFT and the payer follows the instructions in the ERA implementation guide, the timeliness measure will include the payer's estimate of the time the payment will take to reach the payee's bank account. However, when payment is made by check, the time taken to mail the check, for the delivery of the check, and the deposit of the check is not included in the timeliness measure. Payers with higher EFT adoption rates (Metric 3) and/or more conservative approaches to calculating the date EFT payments will be available will be reported as taking longer to make payment than those with lower EFT adoption rates and/or who assume EFT payments are made more quickly. Differences between payers in the reported timeliness metrics may not represent actual differences in the time taken by physicians to receive payment.

Description: What percentage of physician practices have received EFT payments by the payer?

Calculation: For each payer, this metric reports the percentage of physician practices contained in the master database from NHXS that received EFT as a form of payment. The EFT ratio was calculated as the number of practices that received payments via EFT (EFT Adopters) divided by the total number of practices within the respective sample during the analysis period.

Filters: The following filter were applied in order to create the sample frame:

- Paid amount was greater than zero

Data were extracted from the ASC X12N 835 Health Care Claim Payment/Advice (ERA):

- Payer Name (X12 835: N102).
- Payment Method Code (X12 835: BPR04 = ACH or CHK).
- Line Item Provider Payment Amount (X12 835: SVC03>0).

Metric 3A: EFT adopters still receiving checks

Description: What percentage of physician practices that received EFT payments from a payer also received payments by check from the payer during the same period?

Calculation: This metric reports the percentage of physician practices that received EFT as payments from a payer that also received payments by check from the payer during the analysis period. Among EFT adopters reported in Metric 3, for each payer the EFT check ratio was calculated as the number of practices that received checks divided by the total number of practices.

Filters: The same filters as metric 3 were used to determine the claim lines used for the analysis.

Accuracy

Sample size and stratification

For the Accuracy – **contracted rate analyses**, metric 4-5B, the following filters as specified under each metric were applied to the universe. Based on this criteria, there were 3,986,245 records in the universe containing the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. The sample frame contained 2,255,973 records representing the eight reported payers, ranging from 5,620 for Regence to 1,575,496 for Medicare. For additional sample sizes, refer to Table 1 on page 2.

For the Accuracy – **first ERA accuracy analysis**, metric 6, the following filters as specified under the metric were applied to the universe. Based on this criteria, there were 3,986,245 records in the universe containing the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. The sample frame contained 2,221,409 records representing the eight reported payers, ranging from 5,065 for Regence to 1,564,454 for Medicare. For additional sample sizes, refer to Table 1 on page 2. As opposed to the contracted fee schedule match rate metric, all records were considered irrespective of HCPCS Level I or Level II or modifier inclusions.

Contracted fee schedule amounts were acquired in the following priority order: 1) obtaining electronic file of the fee schedule from the payer; 2) building the fee schedule from the payer's website; or 3) building the fee schedule from the plain English description in the physician contract. For Medicare, fee schedule transparency was not an issue because the complete Medicare Fee Schedule allowed amounts are published each quarter.

For all Accuracy metrics, great care was taken by NHXS to ensure that all available criteria were used to assign an ERA to the correct fee schedule, including plan product type (e.g., HMO vs. PPO), fee schedule effective date, physician specialty, type of service, place of service (i.e., non-facility vs. facility), locality, etc. Data was based on dates of service from February and March 2011 because fee schedules typically do not change during these months.¹⁴

¹⁴ In the majority of cases, contracts undergo review for fee schedule modification every calendar quarter. Data for the first month of each quarter (e.g., January) may not be appropriately updated by Jan. 1 and include fees from the last month of the prior quarter.

The Allowed Amount Disclosed and Contracted fee schedule match rate (by major CPT code categories and by state), metrics applied the same filters in order to establish the sample. The ERA accuracy used a different filter set as indicated below. CPT code category and state level statistics were generated for states that met the minimum sample size of 500.

Metric 4: Allowed amount disclosed

Description: On what percentage of claim lines does the payer provide the physician contracted rate (allowed amount) in its ERA response to the physician?

Calculation: Payer allowed amount disclosed was calculated by taking the total claim lines where the payer allowed amount was disclosed divided by the total claim lines within the sample. This metric reports the percentage of claim lines with a non-null value in the Actual Allowed Amount (X12 835: AMT02) of all ERAs for that payer.

Filters: The following filters were applied in order to create the sample frame:

- a. Procedure Modifier(s) (X12 837: SV101-3, SV101-4, SV101-5) = “26”, “TC”, “53” or is null.
- b. Only first-position modifiers that met the criteria in (a) above.
- c. Place of Service (X12 837: SV105) = 11, 21, 22, 23, 31, 32.
- d. AMA Current Procedural Terminology (CPT®) codes where Procedure Code (X12 837: SV101-2) = 10000 ≥ 99999.¹⁵
- e. Line Item Provider Payment Amount (X12 835: SVC03) > \$0.99.
- f. Expected Allowed Amount field (Contracted Fee Schedule) > \$0.99; Date of Service (DOS) (X12 837: DTP03) = valid date within our date range (Feb. 1, 2011–Mar. 31, 2011) where Date Time Qualifier (X12 837: DTP01) = 472; **and** where Date Time Period Format Qualifier (X12 837: DTP02) = D8, or RD8 was used to verify the data period of Feb. 1, 2011 –Mar. 31, 2011.
- g. Physician retail fee schedule is greater than or equal to \$1.00.
- h. Claim line did not meet definition of a denial.

Data were extracted from the ASC X12N 835 Health Care Claim Payment/Advice (ERA):

- Data were extracted into separate data files for each payer where Payer Name (X12 835: N102) = Payer.
- The claim lines where the Amount Qualifier Code (X12 835: AMT01) = B6 **and** the Monetary Amount (X12 835: AMT02) was not null were identified.

The total claim lines identified in the second step were divided by the total number of claim lines or universe for that payer.

Metric 5: Contracted fee schedule match rate

Description: On what percentage of claim lines does the payer’s allowed amount equal the contracted fee schedule rate excluding the application of claim edits and payment rules (rules that adjust the fee schedule amount)?

Calculation: For a service reported in an electronic remittance advice (ERA) to meet the criteria for this metric, the payer’s stated allowed amount for the service must match the contracted fee schedule amount per the physician’s contract with the payer. We define “contracted fee schedule match rate” as the number of records in which the reported allowed amount equaled the contracted fee schedule amount as a percent of all records.¹⁶ However, only certain records were selected in an attempt to control for modifiers, place of service, procedure code and allowed amount. Specifically:

Therefore, comparisons may be inappropriate due to the additional time necessary to update any fee schedule modifications. By using the second and third month of any quarter (e.g., February and March), there is enough time to update fee schedule modifications in the previous month, which generally avoids inconsistencies in fees due to out-dated fee schedules.

¹⁵ CPT is a registered trademark of the American Medical Association.

¹⁶ Neither the magnitude nor the direction of the difference in the allowed amount was considered in this metric because any difference was considered to be a deviation from a proper ERA.

- 1) Only position one modifiers 26 (professional component), TC (technical component), 53 (discontinued procedure), or where the modifier field was blank were included in the analysis because these three modifiers typically have specific allowed amounts in the fee schedule. Services with all other modifiers in the first position and all services with modifiers in the second and third positions were excluded.
- 2) Place of Service indicators were restricted to those identifying the following: Medical Practice (11), Inpatient Hospital (21), Outpatient Hospital (22), Emergency Room (23), Skilled Nursing Home (31), Nursing Facility (32).
- 3) Only allowed amounts > \$0.99 were included as shown below.

The accumulated record counts of claim lines that met the following criteria were divided by the count of the total claim lines within the sample frame to obtain the value for this metric.

Filters: The following filters were applied in order to create the sample frame:

Data were extracted from the ASC X12N 835 Health Care Claim Payment/Advice (ERA), ASC X12N 837 Health Care Claim: Professional and the Physician Fee Schedule Database (PFSDB) by utilizing the following fields:

Fields used for metric 5

- Payer Name (X12 835: N102)
- Fee Schedule ID (NHXS ID)
- Procedure Code (X12 837: SV101-2)
- Procedure Modifier(s) (X12 837: SV101-3, SV101-4, SV101-5)
- Unit(s) (X12 837: SV103), which is the unit or basis for measurement code.
- Place of Service (X12 837: SV105), such as physician office, inpatient or outpatient, hospital, etc.
- Date of Service (DOS) (X12 837: DTP03 and where X12 837: DTP01 = 472 and where X12 837: DTP02 = D8 or RD8), where D8 is the date and RD8 is the date range.
- Actual Allowed Amount (X12 835: AMT02 and where X12 835: AMT01 = B6), where B6 is Allowed-Actual Amount
- Expected Allowed Amount (Contracted Physician Fee Schedule Amount)
- Line Item Provider Payment Amount (X12 835: SVC03)

Claim lines were filtered using the following criteria:

- a. Procedure Modifier(s) (X12 837: SV101-3, SV101-4, SV101-5) = “26,” “TC,” “53” or is null.
- b. Only first-position modifiers that met the criteria in (a) above.
- c. Place of Service (X12 837: SV105) = 11, 21, 22, 23, 31, 32.
- d. AMA Current Procedural Terminology (CPT) codes where Procedure Code (X12 837: SV101-2) = 10000 ≥ 99999.
- e. Line Item Provider Payment Amount (X12 835: SVC03) > \$0.99.
- f. Expected Allowed Amount field (Contracted Fee Schedule) > \$0.99; Date of Service (DOS) (X12 837: DTP03) = valid date within our date range (Feb. 1, 2011–Mar. 31, 2011) where Date Time Qualifier (X12

837: DTP01) = 472; **and** where Date Time Period Format Qualifier (X12 837: DTP02) = D8, or RD8 was used to verify the data period of Feb. 1, 2011 –Mar. 31, 2011.¹⁷

- Data were then organized into separate data sets by payer.
- Expected Allowed Amount, Actual Allowed Amount (X12 835: AMT02) **and** where the Amount Qualifier Code (X12 835: AMT01) = B6 were compared. If these values were the same, this record was added to the count.¹⁸

Metric 5A: Contracted fee schedule match rate by major CPT code categories

Description: On what percentage of claim lines does the payer’s allowed amount equal the contracted fee schedule rate by major CPT code categories?

In order to test for the possibility that major code categories might influence the results, this sample for metric 5A was stratified by the following major procedure codes categories:

- Surgical procedures – 10000 through 69999
- Radiological procedures – 70000 through 79999
- Pathology and Laboratory procedures – 80000 through 89999
- Medicine: 90000 to 99999 (excluding 99201 – 99499)
- E/M procedures – 99201 through 99499

Calculation: For each payer, the analytical process involved subtracting the contracted fee schedule from the payer’s reported allowed amount and grouping these values by procedure code category in addition to all services.¹⁹ The number of records with a zero difference was then divided by the total number of records for that category (or for all services). The result is a percent that represents our contracted fee schedule match rate.

Criteria, methodology and sample size are identical to Metric 5 with the results displayed by major CPT code category. Only CPT code categories that had a minimum claim line count of 500 were reported.

Metric 5B: Contracted fee schedule match rate by state

Description: On what percentage of claim lines does the payer’s allowed amount equal the contracted fee schedule rate by state?

Criteria, methodology and sample size are identical to metric 5 with the results displayed by state. Only states that had a minimum claim line count of 500 were reported.

Metric 6: First ERA accuracy

Description: On what percentage of claim lines does the payer’s allowed amount equal the physician practice’s expected allowed amount?

Calculation: This metric measured the percentage of claim lines where the payer’s allowed amount was equal to the physician practice’s expected allowed amount.

¹⁷ The date has been converted to reflect a single service date.

¹⁸ If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) (Effective at time of sample run) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

¹⁹ If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

For a service reported in an ERA to meet the criteria for this metric, the payer's stated allowed amount for the service must match the physician practice's expected allowed amount consistent with metric 5. In essence, how often can a practice predict how much it will be paid for each service provided. We define "ERA accuracy" as the number of records in which the reported allowed amount equaled the physician practice's expected allowed amount as a percent of all records.²⁰ For this metric, it was necessary to obtain the actual contracted allowed amounts (i.e., fee schedule) for each claim line. It was also necessary to obtain the payer's clinical edit and pricing rules. These rules were obtained from the payer's disclosed policy documents and were compiled by NHXS.

Filters: Claim lines were filtered using the following inclusion criteria.

Data were extracted from the ASC X12N 835 Health Care Claim Payment/Advice (ERA), ASC X12N 837 Health Care Claim: Professional and the Physician Fee Schedule Database (PFSDB) utilizing the following fields:

Fields used for metric 6

- Payer Name (X12 835: N102)
- Fee Schedule ID (NHXS ID)
- Procedure Code (X12 837: SV101-2)
- Procedure Modifier(s) (X12 837: SV101-3, SV101-4, SV101-5)
- Unit(s) (X12 837: SV103)
- Place of Service (X12 837: SV105)
- Date of Service (DOS) (X12 837: DTP03 and where X12 837: DTP01 = 472 and where X12 837: DTP02 = D8 or RD8)
- Actual Allowed Amount (X12 835: AMT02 **and** where X12 835: AMT01 = B6)
- Expected Allowed Amount (Contracted Physician Fee Schedule Amount)
- Line Item Provider Payment Amount (X12 835: SVC03)
- Payer Claim Received Date (X12 835: DTM02)

Claim lines were filtered in order to create the sample frame using the following criteria:

- a. All auditable claim lines other than denials.
 - b. Only the following not auditable claim lines: generally not allowed, invalid payer allowed or unmatched (no ERA for a line item within 30 days of the payer claim received date).
 - c. Procedure Modifier(s) (X12 837: SV101-3, SV101-4, SV101-5) = All.
 - d. Place of Service (X12 837: SV105) = 11, 21, 22, 23, 31, 32.
 - e. Date of Service (DOS) (X12 837: DTP03) = valid date within our date range (Feb. 1, 2011–Mar. 31, 2011) where Date Time Qualifier (X12 837: DTP01) = 472 **and** where Date Time Period Format Qualifier (X12 837: DTP02) = D8 or RD8 was used to verify the data period.²¹
- Not auditable claims lines excluded: capitation, information only, missing rate, no fee schedule, related line, secondary EOB only, transferred (to another payer), zero charge, zero units and documentation required.
 - Data were then organized into separate data sets by payer.

²⁰ Neither the magnitude nor the direction of the difference in the allowed amount was considered in this metric because any difference was considered to be a deviation from a proper ERA.

²¹ The date has been converted to reflect a single service date.

- A count was recorded for each claim line when the:
 - a. Expected Allowed Amount and Actual Allowed Amount (X12 835: AMT02) and where the Amount Qualifier Code (X12 835: AMT01) = B6 were compared, and the values were the same.²²

The accumulated record counts of claim lines that met the above criteria were divided by the total claim lines to obtain the value for this metric.

Administrative requirements – prior authorization

Sample size and stratification

For the administrative requirements analysis, the following filters, as specified under metric 7, were applied to the universe. Based on this criteria, there were 3,986,245 records in the universe containing the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. The sample frame contained 3,132,503 records and all claim lines that met the requirements listed for the metric comprised the sample.

Metric 7: Prior authorization frequency

Description: What is the frequency of prior authorization numbers on professional claims that were accompanied by an ERA with a payment greater than \$0?

Calculation: This metric reports the frequency of prior authorization numbers reported on professional claims that were accompanied by an ERA with a payment greater than \$0 that fell within the study data period. Only claim-level data, not line-level data, was reported.

Filters: The following filter was applied in order to create the sample frame:

Data were extracted from the ASC X12 835 Health Care Claim Payment/Advice (ERA):

- Data were extracted into separate data files for each payer where Payer Name (X12 835: N102) = Payer.
- Line Item Provider Payment Amount (X12 835: SVC03>0).
- All claim lines for each payer that met the criteria were selected.
- For each payer, the total number of claim lines with a prior authorization number (X12 837 Reference segment [REF01] = G1 **and** where the Reference segment [REF01] = G1 is not null) was divided by the total number of claim lines.

Claim edit sources and frequency²³

Sample size and stratification

For the claim edit sources and frequency analysis, the following filters as specified under metric 8-10B were applied to the universe. These selection criteria resulted in 3,886,441 records, ranging from 8,091 for Regence to 2,763,955 for Medicare with dates of services between Feb. 1 and Mar. 31, 2011 and for which an ERA was dated no later than Apr. 24, 2011.²⁴ A claim line edit is a payment rule that always results in an allowed amount of \$0 for that service. An example of an edit is “this service is included in the payment/allowance for another service/procedure that has already been adjudicated.”

²² If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

²³ Payer updates to pricing or edit logic disclosed prior to Feb. 1, 2011 and effective for dates of services between Feb. 1, 2011 and Mar. 31, 2011 were reflected in the results.

²⁴ The number of records for each payer is as follows: Aetna, N=148,126; Anthem BCBS, N=345,011; CIGNA, N=85,314; HCSC, N=180,118; Humana, N=95,623; Regence, N=8,091; UnitedHealthcare, N=260,203; Medicare, N=2,763,955.

Edits were sourced to one or more of the following authors. If the edit occurred in multiple sources, the following hierarchy was used to assign the edit:

- AMA CPT codes, guidelines and conventions
- National Correct Coding Initiative (NCCI)
- Centers for Medicare & Medicaid Services (CMS) Publication 100-04
- American Society of Anesthesia (ASA) Relative Value Guide
- Payer-specific edit (i.e., an edit disclosed and used by the payer and not found in one of the other sources)

Metric 8: Source of payer disclosed claim edits

Description: On what percentage of claim lines is the source of the disclosed claim edit applied by the payer based on one or more of the following: CPT, NCCI, CMS Publication 100-04, ASA Relative Value Guide or payer-specific edits?

Calculation: This metric reports the edit source as a percentage of edited lines based on one of five sources. The specific edit used by the payer was matched to one of the public edit sources and, if found to be consistent with that source, was assigned to that source. If the edit was found in more than one source, the hierarchy of assignment was as follows: CPT, American Society of Anesthesiologists, National Correct Coding Initiative and Medicare Reimbursement Policies. If the edit was not consistent with any of these sources, it was assigned to the payer as a payer-specific edit.²⁵

Metric 8A: Total number of available payer claim edits

Description: What are the total number of available claim edits in each rule source (CPT, ASA, NCCI, CMS, and disclosed payer-specific) by payer?

Calculation: This metric reports the total number of available edits for each payer. Available claim edits were assigned to one of five sources: CPT, American Society of Anesthesia, National Correct Coding Initiative, Medicare Reimbursement Policies, and disclosed payer-specific edits, following the hierarchy stated in metric 8.

Claim edit frequency

Metric 9: Percentage of total claim lines reduced to \$0 by disclosed claim edits

Description: On what percentage of total claim lines does the payer apply a claim edit, which the payer has disclosed on its website or in other provider communications, that reduces the payment (allowed amount) of the claim line to \$0?

This metric reports the percentage of services where the Actual Allowed Amount and the Line Item Provider Payment Amount were both equal to \$0 and the reduction to \$0 matched a disclosed edit (these disclosed edits are adjustments that the payer has made available to the physician on its website or in other provider communications).²⁶ The effect of these edits is to eliminate both the payer and patient's obligation to pay for the service.

The data for this metric were obtained from the fields reported in the following chart for metric 9.

Calculation: Claim lines that met the above definition were counted and divided by total claim lines for each payer.

²⁵ The CMS payer-specific edits are made up primarily of Local Coverage Decisions (LCD). These are payment rules that require certain procedure code-diagnosis code combinations. LCD edits are developed locally by each Medicare Administrative Contractors (MAC) but may be used by any other MAC. The LCD edits ranged from 237,924 for Cahaba Government Benefit Administrators®, LLC up to 2,224,145 for WPS Health Insurance.

²⁶ Claim lines where the Allowed Amount and the Line Item Provider Payment Amount = \$0 and the edit was not disclosed to physicians were excluded from this analysis. These undisclosed edits were included only in metric 10A.

Fields used for metric 9

- Payer Name (X12 835: N102)
- Line Item Provider Payment Amount (X12 835: SVC03)
- Actual Allowed Amount (X12 835: AMT02 and where X12 835: AMT01 = B6)²⁷
- Line Item Charge Amount (X12 835: SVC02)

Filters: The following filters were applied to create the sample frame. Data were extracted from the ASC X12 835 Health Care Claim Payment/Advice (ERA):

- Data on the fields reported in metric 9 were extracted into separate data files by payer.
- Total claim lines were counted by payer.

Metric 10: Percentage of total claim lines reduced to \$0 by undisclosed claim edits

Description: On what percentage of claim lines does the payer apply a claim edit, which the payer has not disclosed on its website or in other provider communications, that reduces the payment (allowed amount) of the claim line to \$0?

This metric reports the percentage of claim lines where the Allowed Amount and the Line Item Provider Payment Amount = \$0 and the edit was not made available to the physician on the payer's website or in other provider communications.²⁸ The effect of these edits on claim lines would be considered underpayments. The data for this metric were obtained from the fields reported in metric 10.

Calculation:

Fields used for metric 10

- Payer Name (X12 835: N102)
- Line Item Provider Payment Amount (X12 835: SVC03)
- Actual Allowed Amount (X12 835: AMT02 and where X12 835: AMT01 = B6)²⁹
- Line Item Charge Amount (X12 835: SVC02)

Filters: The following filters were applied in order to create the sample frame. Data were extracted from the ASC X12 835 Health Care Claim Payment/Advice (ERA):

- Data on the fields reported in metric 10 were extracted into separate data files by payer.
- Total claim lines were counted by payer.

Claim lines that met the above definition were counted and divided by total claim lines for each payer.

Metric 10A: Percentage of total claim lines reduced to \$0 by disclosed and undisclosed claim edits

²⁷ If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

²⁸ Claim lines where the Allowed Amount and the Line Item Provider Payment Amount = \$0 and the edit was not disclosed to physicians. Disclosed edits were excluded from this analysis. These claims lines were included in metric 9.

²⁹ If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

Description: On what percentage of total claim lines does the payer apply a disclosed or undisclosed claim edit (the sum of metric 9 and 10) that reduces the payment (allowed amount) of the claim line to \$0?

Calculation: This metric reports the percentage of total claim lines where the Actual Allowed Amount and the Line Item Provider Payment Amount were both equal to \$0 and the reduction to \$0 either matched a disclosed or undisclosed edit. This metric reports the sum of metric 9 results (percentage of total claim lines reduced to \$0 by disclosed claim edits) and metric 10 results (percentage of total claim lines reduced to \$0 by undisclosed claim edits) by each payer.³⁰

Metric 10B: Percentage of edited claim lines reduced to \$0 by undisclosed edits

Description: On what percentage of the subset of total claim lines that are edited by either disclosed or undisclosed edits (refer to metric 10A) are represented by undisclosed edits, that reduces the payment (allowed amount) of the claim line to \$0?

Calculation: This metric reports the percentage of the subset of total claim lines that were edited by either disclosed or undisclosed edits where the Actual Allowed Amount and the Line Item Provider Payment Amount were both equal to \$0 and the reduction to \$0 did not match a disclosed edit. This metric reports 10A (percentage of total claim lines reduced to \$0 by disclosed and undisclosed claim edits) as a percentage of 10B (percentage of edited claim lines reduced to \$0 by undisclosed edits) by each payer.

Denials

Sample size and stratification

Many denials are not errors, including denials for non-covered service. For the purpose of the NHIRC, a denial has been defined as a claim line where the allowed amount was equal to billed charges and the paid amount was equal to \$0. First, denied services were reported as a percentage of total services. Second, the denials were rank-ordered by the frequency of the reason for the denial. The Claim Adjustment Reason Codes (CARCs) were used for the first level grouping of denial reasons. When a Remittance Advice Remark Code (RARC) was reported in addition to the CARC, these were rank-ordered by frequency as well.

There are 293 ANSI reason codes, of which 214 were valid during the data period. There are 748 active ANSI remark codes, of which 748 were valid during the data period that could be used in combination with any reason code. An ERA can report one or more CARCs and RARCs for a service. Note: at least one CARC is required for every service. RARCs are optional with the exception of the 10 CARCs discussed below.

Based on the denial criteria described above, there were 3,986,245 denials in the universe of services with the DOS during Feb. 1 through Mar. 31, 2011. All records that met the criteria for metrics 11-14 comprised the sample. The number of denials ranged from for 11,005 Regence to 2,669,709 for Medicare. For additional sample sizes, refer to Table 1 on page 2.

To examine whether there was a pattern of use between these two levels (i.e., CARCs and RARCs), a Pareto analysis was conducted to determine which CARCs and RARCs made up the top 80 percent of the denials reported in the first ERA. This was done for each payer and then by both payer types (i.e., all private payers and Medicare).

³⁰ Claim lines where the Allowed Amount and the Line Item Provider Payment Amount = \$0 and the edit was not disclosed to physicians. Disclosed edits were excluded from this analysis. These claims lines were included in metric 9.

The following ASC X12 835 Health Care Claim Payment/Advice (ERA) fields were used for metrics 11-14:

Fields used in metrics 11-14

- Payer Name (X12 835: N102)
- Adjustment Reason Code (X12 835: CAS02)
- Remark Code (X12 835: LQ02 and where X12 835: LQ01 = HE)
- Line Item Provider Payment Amount (X12 835: SVC03)
- Actual Allowed Amount (X12 835: AMT02 and where X12 835: AMT01 = B6)³¹
- Line Item Charge Amount (X12 835: SVC02)

Metric 11: Percentage of claim lines denied

Description: What percentage of claim lines submitted are denied by the payer for reasons other than a claim edit? A denial is defined as: allowed amount equal to the billed charge and the payment equals \$0.

For the purpose of metrics 11–14, a denial is defined as any claim line where the payer’s Actual Allowed Amount ([X12 835: AMT02] and where Amount Qualifier Code [X12 835: AMT01] = B6) = Line Item Charge Amount (X12 835: SVC02) and Line Item Provider Payment Amount (X12 835: SVC03) = 0. These denials all reflect circumstances where further action by the physician is required for payment. The data for this study were obtained from the fields reported in metrics 11-14.

These determinations were made by NHXS and for each denied claim line, an entry of “Denial” was placed in a “Not Auditable Type” field in the master database to allow ease of selection.

Calculation: Count of claim lines that met the criteria stated above divided by the total number of claim lines in the sample frame.

Filters: The following filter was applied to create the sample frame.

- Claim Adjustment and Service Adjustment (CAS01) is not null.

Data were extracted from the ASC X12 835 Health Care Claim Payment/Advice (ERA) for metrics 11-14. Data for the fields listed above were extracted into separate data files by payer.

Metric 12: Reason codes (Claim Adjustment Reason Codes [CARC])

Description: What are the most frequently reported reason codes for a denial?

Calculation: This metric identified and ranked the CARC reported for each denial. The data for this study were obtained from the fields reported in metrics 11-14 above.

Filters: The filter applied for metric 11 was applied to create the sample frame.

- Data on the six fields reported in metrics 11-14 were extracted.
- Data were examined to ensure that there was a valid value in each field and the value met the following criteria:
 - a. CARC = one of the reason codes in the published code set appearing in positions 1 through 6.³²

³¹ If the Actual Allowed Amount was not available, the Actual Allowed Amount was calculated as follows: Line Item Charge Amount (X12 835: SVC02) less the sum of the adjustments for Claim Adjustment Reason Codes (X12 835: CAS02) = 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 24, 41, 42, 45, 47, 54, 57, 58, 59, 65, 94, 97, 103, 107, 110, 112, 122, 128, 131, 134, 139, 146, 147, 150, 151, 152, 153, 154, 155, 163, 164, 170, 171, 172, 173, 174, 175, 176, 181, 182, 186, 189, 194, 203, 231, 234, A1, A2, B10, B14, B15, B16, B17, B18, B22, B6, D21, W1.

b. Actual Allowed Amount = Line Item Charge Amount.

c. Line Item Charge Amount \geq \$0.

d. Line Item Provider Payment Amount = \$0.

- Data were extracted into separate data files by payer.
- Data were organized to show the total number of claim lines reporting each CARC.

Metric 13: Remark codes (Remittance Advice Remark Codes [RARC])

Description: What are the most frequently reported remark codes for a denial?

Calculation: This metric identified and ranked the RARC reported for each denial. The data for this study were obtained from the fields reported in metric 11-14.

Filters: The filter applied for metric 11 was applied to create the sample frame.

- Data on the six fields reported in metric 11-14 were extracted.
- Data were examined to ensure that there was a valid value in each field and the value met the following criteria:
 - a. CARC = one of the valid CARC in the published code set.³³
 - b. RARC = one of the valid RARC in the published code set.³⁴
 - c. Line Item Charge Amount \geq \$0.
 - d. Actual Allowed Amount = Line Item Charge Amount.
 - e. Line Item Provider Payment Amount = \$0.
- Data were extracted into separate data files by payer.
- Data were organized to show the total number of claim lines reporting each RARC.

Metric 14: Percentage of reason codes (CARC) reported with a required remark code (RARC)

Description: What percentage of denials reported provided a required remark code when a reason code specifically states that a remark code should be reported?

Calculation: This metric reports the percentage of denials on claim lines reported that provided a required remark code when a reason code specifically stated that a remark code should be reported. There are 10 CARCs that, according to the HIPAA transaction and code set documentation guidelines and reason code descriptions, require a RARC code. They are as follows: 16, 96, 125, 129, 148, 226, 227, 234, A1 and D23. See CARC Descriptions in Table 2.

Filters: The filter applied for metric 11 was applied to create the sample frame.

- Data on the six fields reported in metric 11-14 were extracted.
- Data were examined to ensure that there was a valid value in each field and that the value met the metric criteria.
- In addition, claim lines containing data that held a CARC = 16, 96, 125, 129, 148, 226, 227, 234, A1 or D23 were selected.
- Data were extracted into separate data files by payer.

³² Available at www.wpc-edi.com.

³³ Available at www.wpc-edi.com.

³⁴ Available at www.wpc-edi.com

- Data were organized to show the total number of claim lines reporting each CARC.
- The percentage of denied claim lines containing a CARC and the required RARC was reported.

Table 2: HIPAA Claim Adjustment Reason Codes Descriptions

CARC	CARC Description
16	Claim/service lacks information which is needed for adjudication. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
96	Non-covered charge(s). At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.) Note: Refer to the 835 Healthcare Policy Identification Segment (loop 2110 Service Payment Information REF), if present.
125	Submission/billing error(s). At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
129	Prior processing information appears incorrect. This change to be effective 4-1-2011: Prior processing information appears incorrect. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
148	Information from another provider was not provided or was insufficient/incomplete. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
226	Information requested from the Billing/Rendering Provider was not provided or was insufficient/incomplete. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
227	Information requested from the patient/insured/responsible party was not provided or was insufficient/incomplete. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
234	This procedure is not paid separately. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)
A1	Claim/Service denied. At least one Remark Code must be provided (may be comprised of either the Remittance Advice Remark Code or NCPDP Reject Reason Code.)
D23	This dual eligible patient is covered by Medicare Part D per Medicare Retro-Eligibility. At least one Remark Code must be provided (may be comprised of either the NCPDP Reject Reason Code, or Remittance Advice Remark Code that is not an ALERT.)

Improvement of the Claims Cycle Workflow

Sample size and stratification

These results were self reported by the payers on a survey sent to the payers on Mar. 21, 2011. Metric 15 results were obtained from CAQH CORE.³⁵ Visit www.ama-assn.org/go/paymentpolicies to access these results.

Metric 15: CORE certification

Description: Is the payer CAQH CORE certified? Source: CAQH CORE

Metric 16: Prior-authorization

Description: Is the payer receiving/sending compliant HIPAA X12 278 Services Review Request for Review and Response standard transaction? Source: Payer self-reported

Metric 17: Claim Acknowledgement

Description: Is the payer sending a HIPAA X12 277 Unsolicited Claims Status transaction? Source: Payer self-reported

³⁵ Visit the CAQH website at www.caqh.org/CORE_step_by_step.php for more information regarding CORE certification.