

## Physician Quality ieporting Initiative

## 2007 Reporting Experience

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## Physician Quality Reporting I nitiative (PQRI) 2007 Reporting Experience

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# Physician Quality Reporting I nitiative (PQRI) 2007 Reporting Experience 

## Executive Summary

The Centers for Medicare \& Medicaid Services (CMS) is working to transform the Medicare program from a passive payer into an active purchaser of high-quality care by linking payment to the value of care provided. Initially, CMS developed a voluntary quality reporting program in 2005, the Physician Voluntary Reporting Program (PVRP), to encourage physicians to report information on the quality of care they were delivering. As authorized by Congress, the PQRI builds on the PVRP by linking payments to reporting quality information. The PQRI is an important first step toward establishing a value-based purchasing program for physicians.

The Tax Relief and Health Care Act of 2006 (TRHCA), enacted on December 20, 2006, required the Secretary to implement less than seven months later by the start of the first reporting period on July 1, 2007, a system for the reporting of data on quality measures. CMS termed this system "PQRI." This implementation schedule required rapid finalization of the detailed specifications for 74 clinical quality measures (covering hundreds of procedure and diagnosis codes), the development of an expanded infrastructure to support the reporting system and extensive outreach to more than 700,000 professionals about the requirements they needed to follow to submit data on quality measures.

The reporting of quality data under PQRI provides a mechanism for physicians and other health care professionals to evaluate and work to improve the quality of care they furnish to Medicare beneficiaries. Data from 2007 show that approximately 16 percent of eligible professionals participated (submitted at least one quality data code) in the program. Of those who participated, just over half were successful in meeting the program and reporting requirements and as a result received an incentive payment. In the 2008 PQRI, we expect participation to increase based on the interest shown in the additional reporting options for measures groups and registry-based reporting implemented in the 2008 program. For 2009, CMS is seeking additional registries for submission of 2009 PQRI data on behalf of eligible professionals. We also expect to see an increase in the percentage of satisfactory reporters due to lessons learned from the 2007 program, including changes to the analysis of claims-based submissions, an increase of the use of registries and a more targeted provider education campaign. All of these lessons and remedies are outlined in this report.

Since we began accepting the quality data in July 2007 for the 2007 PQRI, we have identified and begun to remedy issues and questions raised about the 2007 PQRI results and feedback. CMS analysis of the results of the completed first cycle of reporting has identified a number of unanticipated issues we believe may have impacted the success of physicians and other professionals in meeting program requirements for reporting quality data. These issues, which are outlined in more detail in this report, include claims-based reporting mechanisms issues, National Provider Identifier (NPI) numbers not being included on the claims forms, incorrect quality reporting data or claims submission errors and the content of the feedback reports.

Enhanced education and outreach activities to assist EPs in validly reporting quality data will continue for 2008 PQRI and future years.

This report includes information on how CMS intends to reduce or eliminate the issues identified in the report, as well as new vehicles for quality data submission and increased education and outreach to the provider community on PQRI. CMS is committed to a successful PQRI program.

## I ntroduction

The purpose of this report is to provide a detailed analysis of the 2007 PQRI program, specifically regarding the submission of quality data as it relates to the determination of satisfactory reporting and calculation of incentive payments. We review the various types of submission errors and our findings as to the cause of these errors. In those instances where technical issues contributed, we review analytic changes that we will make for the 2008 data to adjust for those technical factors. We also address issues related to accessing the 2007 feedback reports and the substance of the feedback reports. Finally, we outline our plans to apply modified algorithms for 2008 claims and to apply these same algorithms to the 2007 claims and rerun the analysis.

## Authorizing Legislation

Section 101(b) of division B of the Tax Relief and Health Care Act of 2006 (Public Law 109423; 120 Stat. 2975), commonly known as TRHCA, was enacted on December 20, 2006, and authorized the establishment of a physician quality reporting system by the CMS. CMS named this statutory program the Physician Quality Reporting Initiative (PQRI). ${ }^{1}$

Section 101(c) of such Act established a financial incentive for eligible professionals (EPs) to participate in a voluntary quality reporting program. EPs who chose to participate in the 2007 PQRI and satisfactorily report on a designated set of quality measures on claims for dates of service from July 1 through December 31, 2007, could earned an incentive, subject to a cap ${ }^{2}$, of 1.5 percent of total allowed charges for covered Medicare Physician Fee Schedule services furnished July 1 through December 31, 2007.

Measures for the 2007 program were identified in the TRHCA statute as those developed for the PVRP as of the date of enactment of the TRHCA, but the statute also provided that such measures could be changed by the Secretary based on the results of a consensus-based process in January 2007 and if such changes were subsequently published on the CMS website by a specified date. A portion of the 74 measures and their specifications were developed by the American Medical Association-Physician Consortium for Performance Improvement (AMAPCPI), physician specialties, and the National Committee for Quality Assurance and had received consensus endorsement or adoption. The AMA-PCPI actively participated with CMS in defining the reporting specifications for the measures used in the 2007 PQRI program and developing instructions on how the measurement data would be captured through the claims based reporting process using their Current Procedural Terminology (CPT)-II codes.

[^0]In order to receive the incentive, the EP had to satisfactorily report one to three applicable quality measures. If three or fewer quality measures (out of the 74 measures available for 2007 PQRI) applied to the services furnished by the EP, then each measure had to be reported for at least 80 percent of the cases in which the measure was reportable. If there were four or more quality measures applicable to the services furnished by the EP, then at least three measures, selected by the EP, had to be reported for at least 80 percent of the cases in which each measure was reportable.

EPs could participate in the 2007 PQRI regardless of whether the EP had signed a Medicare participation agreement to accept assignment on all claims.

## PQRI Claims-Based Quality Data Reporting

TRHCA required the 2007 PQRI program to begin on July 1, 2007, and that the quality data be submitted in a form and manner specified by the Secretary (by program instruction or otherwise), which could include claims-based submission. Because the statute required that the PQRI program infrastructure be operational in less than 7 months, submission via Medicare's existing claims processing system was the only feasible data collection/reporting mechanism that would allow CMS to meet the statutory requirement to collect quality data beginning July 1, 2007. Claims-based reporting of the quality measures involves the submission of specific quality data codes (QDCs) on the same claim that contained the associated procedure and diagnosis codes. Criteria were established for the reporting of each QDC; for example, most QDCs could only be reported with selected procedure or diagnosis codes, consistent with the specifications of the associated quality measure as set forth in the specifications document posted on CMS's PQRI website at www.cms.hhs.gov/pqri. Some QDCs were further limited by age and/or gender parameters.

Quality measures in general consist of a numerator and a denominator that permit the calculation of a performance rate which is the percentage of a defined patient population that receives a particular process of care or achieves a particular outcome. The numerator of a measure describes the clinical action required by the measure for reporting and performance. The population of eligible cases for which a measure applies is called the measure denominator (the eligible patient population associated with the measure's numerator).

For reporting the PQRI measures for the 2007 PQRI, the EP reports on the claim a specific Healthcare Common Procedure Coding System (HCPCS) or CPT Category I procedure or service code to indicate the denominator of the measure being reported. For some measures a specific International Classification of Diseases Ninth Edition (ICD-9) diagnosis code must also be submitted on the claim for the measure denominator. The EP also reports on the same claim a QDC to indicate the measure numerator which is a CPT Category II code (or G-code, where CPT Category II codes are not yet available). All of this information must be included on the same claim.

To determine satisfactory reporting of a measure (or the measure reporting rate), the number of QDCs validly submitted for a measure (codes that are reported for the measure numerator) is
divided by the number of opportunities to report the measure's QDC (the number of patients in the denominator population for the measure). The result must be at least 80 percent for the designated reporting period in order to be considered as satisfactorily reporting the measure.

## Business Rules for Reporting Quality Data for 2007 PQRI

Based on CMS's existing claims-based system, specific business rules were adopted for reporting the QDCs associated with the measures for the 2007 PQRI. The general purpose of these business rules was to allow CMS, as required by TRHCA, to determine satisfactory reporting based on 80 percent of applicable patient cases in which such measure(s) was reportable and calculate an incentive payment based on estimated total Medicare physician fee schedule-allowed Part B charges for covered services furnished during the half-year reporting period. Both determinations were required by statute to be made at the individual EP level, with payment made to the holder of the Tax Identification Number (TIN).

The following are the specific business rules that CMS developed and the Agency's reasons/rationale for applying them to the 2007 PQRI:

1. Claims-based submission of data on quality measures required the submission of a QDC. A QDC is a code that is not payable but is submitted as a line item on the claim. This code, whether submitted with a zero or nominal charge, is denied by the carrier/Part B Medicare Administrative Contractor (MAC), but the code is sent forward for inclusion in CMS's National Claims History (NCH) database. The reason for this business rule is to make use of the claims system to submit quality information not otherwise captured on a claim, from which quality measure reporting and performance results can be calculated.
2. The QDC for the measure being submitted by the EP must be submitted on the same claim as the billing and diagnosis code(s) that are associated with the measure specifications. The reason for this business rule is to determine if the QDC for the measure was validly submitted according to the measure specifications. Appendix 1 shows an example of a CMS-1500 billing form completed with the appropriate QDC, diagnosis code, and service or billing code.
3. The correct diagnosis code associated with the QDC must be submitted on the same line on the claim as the QDC. The reason for this business rule is to ensure the appropriate QDC/diagnosis code match for the measure being reported and, in the case of group practices, to ensure the appropriate individual EP is getting credit for the QDC submission.
4. The individual EP must report his/her National Provider Identifier (NPI) on the claim in the rendering provider field. CMS selected the NPI as the method to identify the individual EP submitting the quality data on the claim. The reason for this business rule is that the statute required analysis at the individual EP level. The NPI was determined to be the only reliable identifier that could meet the statutory requirement. Though the NPI
was not yet mandated for Medicare payment in 2007, it was required for participation in the 2007 PQRI program.
5. Line-level reporting of the individual EP's NPI is required. The reason for this business rule is that the statute required analysis at the individual EP level, and the NPI is the only reliable identifier at the EP level. Requiring that the NPI be reported at the line level allowed for differentiation among the individual members of a group practice who submitted services on a single claim.
6. A remittance advice ${ }^{3}$ message is sent to EPs indicating that the submitted QDCs were denied as nonpayable services. The reason for this business rule is to give EPs feedback that the submitted QDC has been received by the claims processing system and will be sent to the NCH file for inclusion in the back end analysis. The remittance advice message, however, is not a validation that the QDC had been accurately submitted.
7. EPs would not be allowed to resubmit claims to retroactively report QDCs or correct previously submitted QDCs. The reason for this business rule is that mass resubmission of claims would have burdened the claims processing systems, possibly to the point of delaying all physician payments.
8. Only claims submitted to carriers/Part B MACs would be considered in the PQRI analysis. The reason for this business rule is that the fiscal intermediary/Part A MACs cannot currently accept line-level EP information, so the individual level analysis required by law could not be accomplished for professionals whose services are not billed to carriers.
9. Analysis for determining satisfactory reporting would be based on the measure specifications. The reason for this business rule is the TRHCA requirement that qualification for satisfactory reporting be based on reporting in at least 80 percent of applicable cases. Applicable cases are determined by the measure's denominator specification. Valid reporting is based on accurately reporting specified QDCs and specified denominator codes.
10. Incentive payments would be calculated at the individual level based on the EP's NPI and then aggregated for payment at the TIN level. The reason for this business rule is that it is most consistent with the TRHCA requirements that satisfactory reporting be based on individual performance and that CMS pay at the TIN level.
11. A confidential feedback report would be produced at the TIN level (for group practices or a solo practitioner) and be available at the time the incentive payments would be distributed via a secure online system. The reason for this business rule is to provide

[^1]information to the EPs/group practices as to whether the EPs met the criteria for satisfactorily reporting, the incentive amount the EPs earned and their measure performance rates.
12. CMS required use of the Agency's Individuals Authorized to Access CMS Computer Systems (IACS) system as the mechanism for EPs and practices to access their confidential feedback reports. This mechanism was adopted for security reasons as the way to verify that the EP (either a solo practitioner or his/her group practice) is who they say they are.

## 2007 PQRI Education and Outreach

The 2007 PQRI program and the business rules for claims based submission were extensively publicized through education and outreach done on both the national and local levels. It began in January 2007 and still continues on every aspect of the program. Central Office (CO) and Regional Office (RO) Medical Officers met frequently with a variety of professional associations and presented at medical society meetings. CO and RO staff utilized established relationships with 39 national and 238 state and local physician and other professional associations. Thirtyfive (35) ListServ messages were sent to associations that in turn, were distributed to members. These same messages were sent to the Quality Improvement Organizations and Medicare carriers/MACs for distribution to over 700,000 individual Medicare physicians and other provider subscribers.

A dedicated web page (www.cms.hhs.gov/PQRI) was created to provide a central location for all information and educational resources. EPs were routinely directed to this site for access to authoritative information. Resources included a coding handbook, MLN Matters articles, fact sheets, tip sheets, and PowerPoint slide sets used on national training calls. Approximately 150 Frequently Asked Questions were developed, marketed and made accessible on the dedicated web page.

Seven national provider conference calls and one call directed at clearinghouses and billing companies were conducted by CO subject matter experts. Fourteen "Ask-the-Contractor" training calls were hosted by carriers/MACs for locally served EPs. Additional training calls were held for the RO and contractor staff prior to the national calls. Participants were instructed to call their carriers/MACs first with any questions or concerns. Carriers/MACs were directed to refer questions that they could not answer to the appropriate support/analysis contractor.

## 2007 PQRI Participation Summary and Earned Incentive Payments

Nationally, 109,349 NPI/TIN combinations (15.8 percent of eligible NPI/TIN combinations) submitted at least one QDC.

To be validly submitted on the claim, the QDC reported must apply to the patient according to the measure specifications (age, gender, diagnosis, and procedure). In addition, the claim must include the rendering professional's NPI, and otherwise comply with PQRI QDC submission business requirements.

Of those 109,349 NPI/TIN combinations:

- 101,138 (92.5 percent) validly submitted at least one QDC;
- 70,207 (64 percent) validly reported quality data on 80 percent of eligible cases for at least one measure; however, may not have earned an incentive because they did not met the criteria for satisfactory reporting;
- 56,722 (52 percent) earned an incentive payment (met criteria of satisfactory reporting by reporting data on 1-3 applicable measures for 80 percent of applicable cases); and
- 770 (1 percent) were subject to the cap; the rest qualified for the full 1.5 percent incentive payments.

A total of 14,089,837 QDCs were reported:

- 51.6 percent were submitted validly $(7,266,783)$; and
- 48.4 percent were submitted invalidly $(6,823,054)$.

Submission of QDCs on claims which did not contain the relevant denominator codes did not count as valid reporting. However, EPs who invalidly submitted QDCs for a portion of their submissions were not penalized as long as they validly submitted QDCs on 80 percent of the cases in which the measure was reportable.

The average (mean) incentive amount at the NPI level was $\$ 634.69$, based on 1.5 percent of estimated total allowed Part B physician fee schedule (PPS) charges processed by February 29, 2008, for the reporting period July 1, 2007 through December 31, 2007.

The average (mean) incentive amount at the TIN level was $\$ 4,712.75$ based on all NPIs associated with a particular TIN.

The total amount of incentive payments made to date for 2007 was $\$ 36,000,668.96$.

## 2007 PQRI Quality Data Submission Review

As listed above, just over 48 percent of the QDCs reported by EPs for the 2007 PQRI were not validly submitted. Based on our review of the QDCs submitted for the 2007 reporting period, we have identified several reasons that we believe caused QDCs to be submitted invalidly.

Listed below are the situations in which QDC or measure submissions were considered invalid. Each of the reasons under items number 1 and 2 below for invalid QDC submissions is included in the 48.4 percent of invalid submissions noted above. The reasons listed for invalid QDC submissions, however, are not mutually exclusive. More than one reason for invalidity may apply to a submitted QDC, so the percentages may not add up to 48.4 percent. Had the invalid submission been valid, it would be expected that additional professionals may have qualified for an incentive payment for 2007. It is not possible to determine the numbers of such professionals that may have qualified.

## Causes of I nvalid Quality Data Submission or Reporting

## 1. Not Adhering to Measure Specifications:

The causes for specific invalid reporting links to business rules numbers 2 , 3, and 9 on pages 7 and 8 of this report. Valid reporting of quality data could only be determined if the measure specifications were adhered to. Based on our review, the following invalid quality data submissions were caused by EPs failing to adhere to measure specifications in submitting QDCs and denominator codes, which were established through a board consensus process that included the physician community. The 2007 PQRI measure specifications are available for review on the PQRI website at www.cms.hhs.gov/PQRI. The quantity and percentage of QDCs that would have been affected are listed.

- Incorrect HCPCS denominator code: 18.9 percent (2,662,023 QDCs). In this example a QDC is submitted and a HCPCS denominator code is submitted, but the HCPCS code submitted was not one that was appropriate for the measure.
o Each measure requires submission of a HCPCS (procedure or service code). A measure that had a high reporting error due to this reason was measure \#30 (Perioperative Care: Timing of Prophylactic Antibiotic - Administering Physician). This was the only measure that required the submission of a CPT II code for the denominator rather than a HCPCS procedure or service code.
- Incorrect diagnosis code: 13.9 percent (1,963,196 QDCs). In this example, a QDC was submitted and a diagnosis code was submitted, but the diagnosis code was not the diagnosis appropriate for the measure being reported.
o Circumstances where the incorrect diagnosis reporting rate was high were measures that required multiple diagnoses, e.g., \#5 (Heart failure: AngiotensinConverting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)), and \#8 (Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction).
- Incorrect HCPCS and diagnosis code: 7.2 percent (1,019,422 QDCs). In this example, a QDC is submitted and a HCPCS code and diagnosis code are submitted, but neither the HCPCS nor the diagnosis code is contained in the reporting denominator for the applicable measure's QDC.
o A measure that had a high reporting error due to this reason was measure \# 7, Beta-blocker therapy for coronary artery disease patients with prior myocardial
infarction (MI). This measure required the reporting of an ICD-9 diagnosis code to identify patients with a diagnosis of coronary artery disease and a diagnosis of MI and a CPT service code for the denominator.
- Incorrect age: 6.0 percent ( 843,689 QDCs). In this example, the QDC is submitted for a patient outside of the age parameters for the measure.
o Many measures are limited by age parameters. Those that only apply to the pediatric or younger adult age population experience very high error rates, e.g., Measures \#53 (Asthma; Pharmacologic Therapy for Ages 5 to 40), and \#64 (Asthma Assessment for Ages 5 to 40). Even those with upper age ranges of age 75, such as the diabetes measures \#1 (Hemoglobin A1c Poor Control in Type 1 or 2 Diabetes Mellitus for Ages 18 to 75), \#2 (Low Density Lipoprotein Control in Type 1 or 2 Diabetes Mellitus for Ages 18 to 75), and \#3 (High Blood Pressure Control in Type 1 or 2 Diabetes Mellitus for Ages 18 to 75), experienced large error rates.
- Incorrect gender: 0.2 percent (22,424 QDCs). In this example, the QDC was submitted for a patient of the wrong gender for the measure.
o Only a few measures are limited by gender, e.g., measure \#39 (Screening or Therapy of Osteoporosis for Women Aged 65 Years and Older).

We have uncovered no technical reason that would have affected our process for determining valid QDC reporting for three of the items noted above: incorrect age, incorrect HCPCS denominator code, and incorrect gender. Failure to adhere to measure specifications related to diagnosis codes is also one cause for invalid QDC submission, inasmuch as many measures are limited to specific diagnoses. The only technical issue we have identified relates to the business rule requiring that a diagnosis be specified for each line item containing the HCPCS code and the line item containing the QDC code. Particularly where there were multiple diagnoses required for a measure, we found that all diagnoses listed may not have been correctly referenced in the analysis because the claims system limits the line item to one diagnosis code only. This could be interpreted as a wrong diagnosis and an invalid diagnosis submission. We are assessing the degree to which diagnoses that appeared on the claim but did not appear on the line item for the HCPCS and QDC were therefore not counted. Depending on the quantity of such cases, the technical processing of line item diagnoses could have impacted the consideration of QDCs being assessed as invalid due to incorrect diagnosis.

Appendix 2 provides details by measure on the frequency of each reason for invalid QDC submissions. This appendix illustrates that there were varying frequencies of errors for each measure.

## 2. Claims Submission/Split-Claims Errors:

Claims submission and/or split-claim errors link back to business rule number 2 on page 7 of this report. Valid reporting could only be determined if the QDC was submitted on the same claim as the billing and diagnosis code(s) that are associated with the measure. In searching for technical issues that may explain a portion of the invalid QDC submissions we separated out those QDCs that were submitted invalidly because of missing HCPCS codes, not just an incorrect HCPCS
code as described above. This was done because a missing HCPCS code could be an indicator that the claim was split (i.e., separated into smaller claims) prior to submission or during the processing of the claim by the carrier/MAC; the initial single claim therefore would have arrived in the claims data file used for the PQRI determinations as multiple claims.

We found that a total of 6.3 percent of QDCs had no HCPCS on the claim. When claims are split prior to submission to the carrier/MAC by the EP's billing software or clearinghouse software, there is no identifier on these claims to indicate that they were originally part of a single claim. For analysis purposes, it was assumed that these split claims were separate, unrelated claims. However, to identify these circumstances we reviewed all claims containing only QDCs to determine if there were other claims with HCPCS codes that also were for the same beneficiary, date of service, TIN and NPI. The 6.3 percent of QDC submissions with no HCPCS on the claim can be further broken out as:

- Only QDC on claim: 5 percent (700,201 QDCs). In this example, a QDC was submitted on a claim, but there was no HCPCS code on the claim to determine the appropriate denominator population for the measure. All measures must contain at least one HCPCS code in the reporting denominator.
- QDC and incorrect diagnosis code on claim: 1.3 percent (184,519 QDCs). In this example, a QDC was submitted on a claim, but there was no HCPCS code on the claim and the diagnosis code reported was not the diagnosis code required for the measure's denominator population. All measures must contain at least one HCPCS code in the reporting denominator. However, not all measures require a diagnosis code to determine the denominator population.

We found that for 32.8 percent of claims with only QDCs, we were able to match the claim with another claim that contained a HCPCS code and diagnosis code with the same patient identifying information and date of service. We estimate that the impact of this technical issue to be 2 percent overall. This could impact the number of professionals who otherwise would have qualified for satisfactory reporting for 2007.

We were aware in developing the analytics for 2007 that in some cases carriers/MACs split claims for processing. To account for this, our contractor established a routine for 2007 analysis to reconnect these split claims for PQRI analysis. However, that routine was limited to claims that contained 13 or more line items. In conducting our recent review, we found that 2.4 percent of claims where there were only QDCs present had been split by the carrier/MACs. This amounts to only 0.2 percent of QDC submissions. We therefore will modify the analytics for the 2008 PQRI program and future years to reconnect any claims split by carriers/MACs now that we are aware that there are instances where there are claims with fewer than 13 lines that may be split by carriers/MACs.

## 3. No NPI on the Claim:

Requiring an NPI on the claim links back to business rules number 4 and 5 on pages 7 and 8 of this report because the statute requires analysis or determination of satisfactory reporting at the individual EP level, and the NPI is the only reliable identifier at the EP level. In some cases the
business rule requiring the NPI for valid quality data submission and analysis had an impact on the analysis and determination of whether or not an EP satisfactorily reported. A total of 12.2 percent or $1,711,975$ QDCs reported did not include an NPI on the line on which the QDC was reported. Lack of a NPI on the claim or line may have been caused by the EP's failure to include it on the claim or line or errors made by the EP's billing software or clearinghouse software. A discussion of the NPI issue follows.

- The absence of an NPI affects both acceptance of the QDC and inclusion of associated charges on claims for calculation of incentive payment amounts, based on the requirement that both satisfactory reporting and the incentive payment amounts be determined at the individual level. QDCs submitted on a claim without an NPI are not attributed to the individual and are not counted as valid reporting. Similarly, charges submitted on a claim without an NPI are not attributed to an individual and therefore cannot be considered in the calculation of an incentive payment. ${ }^{4}$
- Professionals who qualified for the 2007 incentive payment were eligible for the incentive payment even if they submitted additional QDCs without an NPI. On the other hand, the absence of an NPI on any claim would mean that the associated charges would not be captured for the purpose of determining the estimated total allowed charges on which the incentive payment is based.
- In reviewing the missing NPI issue we tracked representative cases from the claim all the way through the claims warehouse and to the database used for the satisfactory reporting determination and the incentive payment calculation. We have not encountered mishandling of the NPI once the NPI was received by the carrier/MAC in the appropriate place on the claim (i.e., as the rendering NPI for the HCPCS and QDC line item codes). On the other hand we have encountered situations where EPs’ electronic data interface software or clearinghouse processes led to NPIs not being submitted or being incorrectly submitted, such as transposing the NPI from the line item to the referring NPI field. In these circumstances the requirement that the NPI appear on the line item for the HCPCS and QDC was not met.
- The missing NPI issue affected approximately 12 percent of QDCs that were submitted and which therefore were not considered as valid reporting. Other errors discussed previously may also have been present, so it is not possible to determine the degree to which the associated QDC would have been valid had the NPIs been present. We are also unable to determine the impact on the amount of incentive payments that professionals would have received had the NPI been reported on the line with HCPCS charges for these professionals. The requirement that both qualifications for an incentive and the amount of the incentive be determined at the individual professional level prevents us from attributing either the QDCs reported or the charges submitted to an individual and to consider these for PQRI.
${ }^{4}$ Although such charges are not included in the PQRI incentive payment calculation, such charges associated with the underlying services that were furnished in 2007 would have resulted in payment as appropriate under the PFS even without the NPI on the claim.


## Other I ssues Affecting Satisfactory Reporting

In conducting additional reviews of the data submitted for the 2007 reporting period, we identified a data issue involving claim types for certain Durable Medical Equipment (DME) items that were included in the analysis for 2007. In our preliminary review, it appears that these particular claims which were submitted correctly by EPs to the carrier/MAC and sent on to the NCH also included data elements (HCPCS codes, diagnosis codes and the EP's NPI), that gave the appearance they were claims that should have also included a QDC for a measure. We did not adjust for these types of claims in our analysis for 2007, so they were included, rather than excluded. Consequently this may have caused an affected EP's denominator population for a measure to be falsely inflated, potentially resulting in the EP's failure to meet criteria for satisfactory reporting a measure for 2007 and thereby not be eligible for an incentive payment.

## 2007 Feedback Report I ssues

The business rules for 2007 PQRI required the production of a confidential feedback report at the TIN level, to be available at the time the incentive payments would be distributed to the EPs. The purpose of the report was to provide information to the EPs/group practices as to whether the EPs met the criteria for satisfactorily reporting, the incentive amount they earned, and their measure performance rates. The reports were not intended to provide quality improvement information.

CMS used the Agency’s Individuals Authorized to Access CMS Computer Systems (IACS) system as the mechanism to access the feedback reports. This mechanism was chosen for security reasons as the way to verify that EPs (either solo practitioners or group practices) are who they say they are.

CMS acknowledges that registration for an IACS account has, for some physicians and other eligible professionals, been both cumbersome and time consuming. CMS has responded by reviewing and reissuing the MLN Matters articles that lay out, step by step, what is required. CMS is also further considering ways to improve the process without compromising data security. The rigor of the approval process is to ensure only those who are authorized to see provider-specific data, like the PQRI feedback report, can gain access. If an individual EP can use staff to access reports or the EP is a group practice, the IACS registration process that must be used is that for an IACS "organization." IACS organization registration requires initial registration by a security official (SO) for the organization, who then can authorize other users to access the organization's feedback report. The process to approve the SO for an IACS organization takes approximately 13 days on average and includes providing CMS with hard copy Internal Revenue Service documentation. In 2007, because of the potential IACS registration volume for competing applications (e.g., the Durable Medical Equipment Competitive Bidding System) slots were allocated to each application based on estimates of need. For 2007 PQRI, IACS organization registrants were provided the ability to assign two individuals to access the organization's feedback report.

The IACS registration process for the practitioner who is a sole proprietorship and must therefore personally retrieve his or her report is easier and takes hours at most; however, for security purposes, the practitioner's enrollment status is checked against the Agency's Provider Enrollment, Chain and Ownership System, or PECOS, to determine if the practitioner has an active Medicare enrollment. If the PECOS status is "inactive," the practitioner's access to his/her PQRI feedback report is put in a pending status. This usually means the practitioner's enrollment information needs to be updated before he/she can gain access to a CMS application such as PQRI Feedback Reports. Currently, practitioners are only notified that they are in a pending status when they attempt to enter the PQRI application. However, they are not informed of the reason why they are put in a pending status for accessing their PQRI feedback report. The potential reasons are now fully discussed in the revised MLN Matters articles on IACS registration for accessing PQRI feedback reports.

To address questions about whether a feedback report was available and/or how the incentive payment was calculated, CMS developed various educational materials that were posted on the CMS PQRI website. Information related to these topics was also discussed during National Provider Calls in July, August, and September 2008.

## I mpact and Changes for 2008 PQRI

The 2008 PQRI reporting year is nearly complete. Eligible professionals who have submitted quality data during 2008 may be impacted by invalid QDC reporting. However, in some cases we will make changes to our analytics for the analysis of the 2008 data to adjust for technical factors that may have contributed to invalid QDC reporting that we identified in the 2007 PQRI.

Failure to Adhere to Measure Specifications. The primary reason for invalid reporting for the 2007 PQRI was the failure to adhere to the measure specifications. We cannot address these causes by revisions to the analytics used to determine valid QDC submission and satisfactory reporting. However, we will be enhancing and expanding education and outreach activities to help EPs understand each measure's reporting specifications. (See "Conclusion" section on the following page.)

Carrier/MAC Processing Procedures. Except for the 0.2 percent submission of invalid QDCs that we can attribute to the carriers/MACs splitting claims with fewer than 13 lines, we have not found any carrier/MAC processing procedures that would impact bonus determinations and calculations. However, we will use a modified analytic routine so that the claims split by carriers/MACs, regardless of how many lines are included on the claim, will be reconnected and counted for 2008.

NPI. We believe that the NPI will not be a significant issue for 2008. An NPI edit for Medicare payment was implemented by the carriers/MACs as of March 2008. Claims submitted by EPs that do not include an NPI on their claim will be rejected. For the first half of 2008 PQRI reporting, the number of claims with missing NPIs has been reduced to less than 1.0 percent, and we expect it to be less than 0.5 percent for the entire 2008 program year.

Claims with Only QDCs. As for the occurrence of claims containing only QDCs, we intend to apply the analytic adjustment for 2008 that will bring back together claims split during claims submission processes that occur prior to the carrier. This will not address all claims containing only QDCs, but only those that result from split claims. For QDCs that cannot be matched to another beneficiary claim for the same NPI, TIN and date of service, the reason for the claim containing only a QDC is not due to technical processing procedures but the failure to follow the basic business rules.

Incorrect Diagnosis Issues. When analyzing the 2008 data, we will look at all diagnoses submitted on the claim as well as the line-item diagnosis. We will further assess the degree of impact that this is likely to have. This modification to the analytics may result in QDCs being considered valid based on including all diagnoses on the claim rather than limiting analysis to only line-item diagnoses. However, our ability to use this modified analytic may be limited by the requirement to make PQRI determinations at the individual physician level where multiple professionals bill on the same claim for the same patient. Therefore, the business rule for submitting the correct diagnosis code associated with the QDC on the same line on the claim as the QDC will not change; however, since our systems may not capture more than one diagnosis code, we will revise the analytics to look at all diagnosis codes on the claim as well as the lineitem diagnosis code.

Submission of Claims Involving DME Items. We will adjust for these types of claims so that they are excluded from PQRI analysis and we do not falsely inflate an EP's denominator population for applicable measures. For 2008, at a minimum, we will implement a new business rule to look across all claims submitted to determine if there appear to be duplicate claims for the same HCPCS denominator code for the same patient, date of service and EP's NPI and only count the claim once so that an EP's denominator population is not falsely inflated.

Feedback Report Content. For 2008, the business rules for the content of the feedback report will change. EPs complained that the 2007 feedback reports were difficult to understand and did not explain why they did not qualify for an incentive payment. The 2008 feedback reports are in the process of being redesigned to better reflect the frequency of the measures QDCs reported, reasons why EPs did not earn an incentive payment (such as when they have mismatched QDCs), and measure performance information. Based on 2007 experience, explanatory information on IACS registration will be strengthened. Earlier outreach and education to the EPs will be provided, explaining how to access their 2008 feedback report and encouraging them to obtain their IACS account early. We will further consider whether there are additional ways to address the report access concerns.

## Conclusion

The results of the implementation of PQRI in 2007 have indicated that the claims-based mechanism used by EPs to report quality data was successful, as more than half of all who participated in the program satisfied the statutory requirements for satisfactory reporting and thereby earned incentive payments. Results have also shown that PQRI is not without issues. As
outlined in this report, CMS uncovered some specific problems that led to lower than expected satisfactory reporting. These major areas are outlined below.

## National Provider Identifiers (NPIs)

TRHCA required that the determination of satisfactory reporting and the amount of the incentive payment for 2007 be at the individual EP level, and thus the NPI was selected as the most reliable individual identifier. When the program was implemented in 2007, NPI use was not mandatory for claims payment, but was required for PQRI participation. We believe many EPs unknowingly may have submitted PQRI data without an NPI (possibly because of EP billing software issues or clearinghouse issues) assuming that their submission would count towards the PQRI program.

We believe this NPI issue is a major reason why EPs have difficulty reconciling their records based on paid claims with the results as reflected on the feedback reports. We have found that approximately 12 percent of claims for which quality data were reported did not identify the rendering professional's NPI. On claims that did not include the EP's NPI, neither the reported QDC nor the charges submitted were considered for PQRI. That meant these claim submissions would not count toward either satisfactory reporting or calculating the amount of an incentive payment.

We believe that this problem has largely been resolved for 2008 due to the requirement of an NPI for claims payment. However, we cannot adjust for the missing NPIs for 2007 and still comply with the statutory requirement for incentive payment determination at the individual EP level.

## Quality Data Reporting Issues

A large number of submission errors involved reporting QDCs for patients that did not fit the reporting specifications for the measure submitted. Depending on the circumstances, this meant that the reported QDC was submitted for patients who did not meet the gender, age, diagnosis or procedure code specifications for the measure. In most of these cases, this was due to incorrect reporting by the EP of QDCs and denominator codes for the measure.

We are finding fewer of these types of errors in submissions in 2008, and we believe with additional education and outreach efforts to help EPs meet the specifications the number of errors will continue to decline.

However, we have identified situations where EPs attempted to submit appropriate diagnosis and/or procedure codes on the claim, but claims handling procedures by the carriers/MACs or submission error by the submitters' clearinghouses or billing software impacted how those codes were processed. Because of those processing rules and billing errors, the EPs did not receive credit for reporting the measure correctly as part of their PQRI submission, so while they did get paid for the service, they may not have qualified for an incentive payment.

For example, we found cases that involved splitting of claims principally by physician billing software and clearinghouses before the claims were received by the carriers/MACs as well as split claims by the carriers/MACs. Claims that were split separated the procedure codes from the

QDCs, so these claims were not counted toward satisfactory PQRI reporting. In another example, diagnosis codes were required under PQRI to be directly associated on the claim with the specific QDC submitted. In some cases the diagnosis code was present on the claim but not on the same line item as the QDC. These claims were also not counted toward satisfactory PQRI reporting.

As a result of our analysis of the split claims, diagnosis submission issues and claims involving DME items, and their impact on the QDC reporting analysis, we have identified modifications we can make to the analytic programs and algorithms we believe will address these specific claims processing procedure issues. We will rejoin split claims as appropriate, include all diagnosis codes on the claim in the analysis, and check for the appearance of duplicate claims. These changes will be applied to 2008 quality data submissions so these factors will not adversely affect satisfactory reporting for 2008.

We are also applying all modifications to the analytics for 2008 to the 2007 submissions and will rerun the 2007 analysis. We expect that additional EPs will qualify for an incentive payment for both 2007 and 2008 based on this effort. We anticipate that these new analyses and any associated incentive payments for both 2007 and 2008 will be completed and paid by the fall of 2009 based on the need for an additional three months to program the modified analytics that will be used for analyzing the data.

## Feedback Reports

CMS received concerns about feedback reports being difficult to access or complicated to understand. Others have asked for more frequent reports.

We are required to meet government-wide security requirements to provide online access to reports. We are investigating other avenues to help EPs access the reports, but we do not expect to make any changes that will impact those physicians and professionals who have already established security accounts.

As to the substance of the reports, some professionals found the reports contained too much information. In response to these comments we will simplify the reports. We plan to list only measures that the EP actually submits. We will also provide more detailed information to help submitters understand the analysis of the data they submit.

We agree that more frequent and up-to-date reports would be helpful; however, we face certain practical limitations that make it difficult to achieve that goal. After a reporting period closes, there is a time lag to allow for claims submission to be completed. Nevertheless, we believe that we can provide aggregate information to professionals on a measure-specific basis that will identify key issues for particular measures. Where possible, we will provide information about reporting errors.

## 2008 Education and Outreach

CMS recognizes the need for continued extensive provider and professional education around requirements for satisfactory reporting of quality data for PQRI. This includes additional education based on lessons learned from the 2007 PQRI.

In 2008, we conducted extensive education and outreach with professionals both at the national and local level. These activities included:

- Conducting 6 National Provider Calls between April and September 2008 on such topics as the 2008 reporting options, the measures groups new for 2008, how to access the 2007 feedback reports, and the new Medicare Improvement for Patients and Providers Act of 2007 provisions for PQRI and electronic prescribing. We also responded to questions from participants on these calls. The calls were very well attended with over 1,000 and for some calls, over 1,700 active participant lines.
- Conducting five Special PQRI Open Door Forums which were co-hosted by specialty associations and were targeted toward helping their specific constituents participate in PQRI. These specialty societies included the American Academy of Family Physicians, the American College of Physicians, the American Academy of Ophthalmology, the American Gastroenterological Association Institute, and the American Optometric Association.
- Developing and posting a variety of educational materials on CMS's PQRI-dedicated website to assist EPs in participating in the program. These materials included:
o Presentation materials from National Provider Calls and Special PQRI Open Door Forums;
o "The 2008 PQRI Initiative: Establishment of Alternative Reporting Periods and Reporting Option," which outlined the new alternative reporting periods and alternative criteria for satisfactorily reporting quality measures for 2009;
o "The 2008 PQRI Registry Requirements for Submission under the New Reporting Options," which described the requirements registries would have to meet to be qualified for the 2008 program;
o "2008 PQRI Data Collection Worksheets," which provided worksheets for EPs to use to help them with the data collection needed for reporting the measures;
o "2008 Measures Specifications Document," which outlined what information to submit on the claim for each measure;
o "2008 PQRI Reporting Options Fact Sheet";
o "2008 PQRI Reporting Options Quick Reference Guide";
o "Getting Started with 2008 Measures Groups Guide";
o "2008 PQRI Claims-Based Measures Groups Specification Handbook";
o "2008 PQRI Patient Level Measures Reference List";
o "PQRI Made Simple for Reporting the Prevention Measures Group";
o "2008 PQRI Test Measures Specifications and Test Measures Release Notes";
o List of Registries that qualified for 2008 PQRI that professionals could authorize to submit PQRI data on their behalf;
o Reporting specifications for a set of measures that can be reported through an Electronic Health Record;
o MLN Matters Articles on 2008 alternative reporting periods and reporting criteria and steps for accessing the 2007 feedback reports; and
o A "Guide to Understanding the 2007 Feedback Reports."
- Updating the Frequently Asked Questions on the PQRI website and adding additional questions specific for the 2008 program.
- Developing and distributing two press releases, one drop-in article and more than 20 ListServ messages about the 2008 PQRI program to associations for distribution to their membership.
- Conducting over 70 speaking engagements through Regional Office Medical Officers and Central Office staff with a variety of local medical societies as well as at larger regional and national conferences.

Moving forward, CMS has put together an education and outreach plan that will allow EPs and their staffs to easily obtain information about the PQRI program. For the 2009 program, we will again:

- Conduct monthly National Provider Calls that focus on important topics for reporting PQRI measures for the 2009 programs;
- Update and expand the frequently asked questions available on CMS's PQRI website at www.cms.hhs.gov/PQRI;
- Post the updated measure specifications for those measures to be used in the 2009 program;
- Develop and post updated tip sheets and fact sheets for the 2009 program to assist EPs in reporting quality data to CMS by the claims-based system or through qualified registries;
- Conduct more educational sessions with the carriers/MAC contractors;
- Continue to provide speakers at local, regional, and national conferences on PQRI topics. CMS regional office staff will also continue to be a resource to EPs in providing assistance and in providing education and outreach activities at the local level;
- Develop a web-based education course on PQRI and the Electronic Prescribing incentive that offers continuing medical education credit to EPs (a new activity for 2009);
- Actively partner with the American College of Physicians and the American Academy of Family Physicians to conduct and develop additional education and outreach materials/activities to increase participation in PQRI; and
- Widely share information learned from the 2007 program experience.


## New Reporting Options for 2008

CMS has established new reporting options making it easier for EPs to participate in PQRI for 2008. The Medicare, Medicaid, and SCHIP Extension Act of 2007 required CMS to establish alternative reporting periods and alternative criteria for satisfactorily reporting measures groups and for satisfactorily reporting through registry-based reporting. These new options give the

PQRI program flexibility by establishing alternative mechanisms for reporting quality data, which will provide more ways for EPs to qualify for an incentive payment.

For 2008 there are nine options that EPs can choose from to participate in PQRI and potentially earn an incentive. The options include three that are claims based and six that are registry based. Those EPs that want to participate in PQRI can choose to report quality measures via claims in the standard way (one to three individual measures on 80 percent of their patients) for the 12 month 2008 reporting year, or they can report one measures group on 15 consecutive patients or on 80 percent of their eligible patients for the six month reporting period July 1 to December 31, 2008. For 2009, CMS is seeking additional registries for submission of 2009 PQRI data on behalf of eligible professionals. More information can be found at www.cms.hhs.gov/pqri.

EPs may choose to report data on quality measures through a medical registry, and these registries will then report that data to CMS. Those EPs who choose to report through a registry can report a minimum of three individual measures on 80 percent of applicable patients for either the full-year or the half-year reporting period or they can select to report one measures group on 30 consecutive patients for the full-year reporting period or 15 consecutive patients for the halfyear reporting period to qualify for an incentive payment. CMS has reviewed and approved 32 existing registries as "qualified" for 2008 PQRI reporting and will increase the number of registries as more apply and/or become available. Many providers are already reporting to registries and utilizing that reporting process will avoid redundancy as well as avoiding some of the potential barriers encountered heretofore in claims reporting.

During 2008 several National Provider calls and special PQRI Open Door Forums were held with providers describing these new reporting options and answering questions related to these options. Detailed information about these reporting options is available at www.cms.hhs.gov/PQRI. Also on our PQRI website are a variety of tip sheets and fact sheets that provide more information on how to report measures groups and how to report through medical registries.

In addition, CMS is testing the submission of quality data through electronic health records and anticipates proposing this as another option for reporting quality data to CMS for the 2010 PQRI reporting year. Over the next several years, CMS intends to work with physicians and other health care professionals, vendors, specialty societies, and others to migrate from claims-based reporting to electronic reporting, which, in combination with registry reporting, will increase the efficiency, accuracy and timeliness of data collection and use.

Medicare is rapidly transforming from a passive payer into an active purchaser of high-quality care by linking payment to the value of care provided. PQRI is an important first step toward establishing a value-based purchasing program for physicians. PQRI participation rates should increase over time, much like participation rates for the Medicare participating physician program, which began in 1984. Participating physicians voluntarily sign agreements to accept assignment for services furnished during the following year. Physicians who sign participation agreements receive a 5 percent payment differential. Initially, about 30 percent of physicians signed participation agreements, but the number increased to about 90 percent by the mid-1990s and was at 95 percent in 2007.

# Appendix 2: Quality-Data Code Submission Error and QDC Only Claims Ad Hoc Report 2007 Physician Quality Reporting I nitiative <br> Report Date: October 9, 2008 

## Quality Data Code Submission Error Report by Measure

This report displays the following information:
Number of Quality Data Code (QDC) submissions for a measure whether or not the QDC submission was valid and appropriate
Number of valid and appropriate QDC submissions for a measure (\# Accepted).
Number of QDC submissions that were not accepted due to not meeting the gender requirements for the measure Number of QDC submissions that were not accepted due to not meeting the age requirements for the measure (Age).
Number of invalid QDC submissions resulting from an incorrect HCPCS code (Incorrect HCPCS).
Number of invalid QDC submissions resulting from an incorrect diagnosis code on the claim (Incorrect DX).
Number of invalid QDC submissions resulting from a combination of incorrect HCPCS code and incorrect diagnosis code (Incorrect HCPCS and DX).
Number of invalid QDC submissions due to a missing qualifying denominator code since all lines were QDCs (Only QDC Number of invalid QDC submissions due to a missing qualifying denominator code since all lines were QDCs and the diagnosis codes were incorrect (Only QDC on Claim and Incorr DX).
Number of QDC submission attempts (whether or not valid and appropriate) where the rendering NPI was missing (NPI
Problem - QDC no NPI).

## Analytic Information:

A QDC submission attempt may be counted for age, gender, and one of the following: Incorrect HCPCS, Incorrect DX, Incorrect HCPCS and DX, Only QDC on Claim, and Only QDC and Incorrect DX (i.e. a submission attempt may be counted for age, gender, and incorrect DX).

## Findings:

$12.15 \%(1,711,975)$ of QDC submission attempts were associated with a missing NPI
$18.89 \%(2,662,023)$ of QDC submission attempts occurred with an incorrect HCPCS code.
$13.93 \%(1,963,196)$ of QDC submission attempts occurred with an incorrect DX code.
$7.24 \%(1,019,422)$ of QDC submission attempts occurred with both an incorrect HCPCS code and incorrect DX code.
$4.97 \%(700,201)$ of QDC submission attempts occurred on claims where all line items were only QDCs.
was incorrect.

## Quality Data Code Only Report by Measure

This report displays the following information:
Number of Quality Data Code (QDC) submissions for a measure whether or not the QDC submission was valid and Number of invalid QDC submissions due to a missing qualifying denominator code since all lines on the associated claim were QDCs. These are referred to as Orphan QDCs (\# Reports on QDC Only Claims).
Number of attempted submissions associated with QDC only claims where the denominator HCPCS code for the measure was on a different claim for the same TIN, NPI, beneficiary, date of service (\# Denom on Different Claim).
Number of attempted submissions associated with QDC only claims where the first 14 digits of the ICN and bene_clm_num_equate match the claim containing the denominator HCPCS code for the measure with the same TIN, NPI, beneficiary, date of service. These might have been rejoined claims if the number of lines were not set at 13 (\#

## Findings:

$6.28 \%(884,720)$ of all submission attempts were invalid since the QDCs were associated with QDC only claims.
$32.82 \%(290,357)$ of the invalid attempts due to orphan QDCs have an associated denominator code on another claim with the same TIN, NPI, beneficiary, date of service.
$2.37 \%(20,987)$ of invalid attempts due to an orphan QDC would have had a matching denominator instance on the same claim if less than 13 lines would have been used for rejoining split claims. These account for $0.15 \%$ of all QDC submission

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| \％89＇8 | 296＇ธ |  |  | \％9t＇$\varepsilon$ | ＜8L |  |  |  |  | \％てヤ＇tを | 切T「L | \％00＇0 | 0 | \％00＇0 | 0 | \％てt＇s9 | LO8＇t | 8\＆L＇zz |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 9¢ |
| $\% 8 \varepsilon^{\prime} \varepsilon \tau$ | TS6＇6 | \％080 | દ८乙 | $\%<8 ' \subseteq$ | 298＇ь | \％8が0 | ¢¢ | \％ 0 O＇t | عо0＇$\varepsilon$ | \％t9＇s | 89I＇t | \％00＇0 | 0 | \％68＇0 | $\angle 82$ | \％0＜＇\＆8 | Oせて＇Z9 | O98＇t $L$ |  |
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| \％ 2 ＇ST | LLE | \％$\underbrace{\prime \prime}$ | $\varepsilon \varepsilon$ | \％ャ6＇ | 66 | \％68＇tを | 882 | \％08 8 | TZZ | \％LL＇Lt | 66T＇土 | \％8＜＇＇ 6 | ๖¢E＇乙 | \％00＇0 | 0 | \％08＇t | $80 \tau$ | OTS＇z | јuәussəss eulis $^{\text {b }}$ ¢9\＃\＃ |
| \％98＇$\varepsilon$ โ | 8T0＇ธ | \％ちT＇T | ¢8 | \％0т＇ | 822 | \％$\%$＇s | LOt |  | 9St＇t | \％s8＇$\varepsilon$ | £82 | \％ 26 ＇ 66 | ¢ャO＇L | \％00＇0 | 0 | \％8\＆＇乙 | SLI | カャを＇L |  |
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| \％ 9 ＇ 2 | L८9＇¢ ${ }^{\text {c }}$ | \％T9 $\stackrel{\text { L }}{ }$ | 8Lt＇s¢ | \％ot＇0 | ${ }^{8 t 5}$ |  | L66＇SST | \％ C ＇89 | 869＇TLZ | \％99 0 | ＜29 | \％が＇0 | TLO＇z | \％000 0 | 0 | \％St＇0 | L60＇z | 68t＇99t |  |
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| \％0т＇0 | 296＇工 | \％0ヶ\％ | 82 | \％9b＇t | t82 | \％98＇9 | ¢\＆z＇t | \％SS＇TI | ャャて＇z | \％60＇s | 686 | \％00\％ | 0 | \％000 | 0 | \％\＆t＇SL | ¢6S＇ฟ | ちてt＇6¢ | ｜en！ut 18 u！！ |
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| \％68 \＆ | T06＇t | \％6て＇T | 『St | \％50＇8 | тャ8＇Z | \％SS＇T | 9ts | \％ヶGZて | 92 ＇t | \％68＇L | 98L＇z | \％00\％ | ז | \％000 | 0 | \％89＇89 | 98て＇ヤて | ${ }^{\text {L82＇¢ } ¢}$ |  |
| \％8て＇$¢$ | 2¢8＇t | \％bt＇t | STt | \％6て＇L | $89^{\prime \prime 2}$ | \％6Tく $<$ | 692＇9 | \％01＇2 | 292 | \％69＇$\varepsilon$ | ＜te＇T | \％00\％ | 0 | \％00\％ | 0 | \％89＇89 | 600＇sz | 99t＇98 |  |
| \％ST＇$\varepsilon$ I | 66L＇t | \％880 | 0 ¢ | \％ $20{ }^{\circ} \mathrm{L}$ | 99s＇z | \％LZ＇TI | عזt＇t | \％で＂ | £¢T | \％66 6 \％ | S66＇ع | \％00\％ 0 | 0 | \％00\％ | 0 | \％9t＇69 | ts8＇sz | Tos＇98 | K．10， |
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| \％L＋＇Z | tit＇s |  |  | \％00＇$\varepsilon$ | 乙८z＇ |  |  |  |  | \％66669 | L69＇82 | \％ST＇L | โ¢6＇z | \％00＇0 | 0 | \％99＇zz | 262＇6 | Too＇tt | иоп̣е！！！uozay uoneo！paw 9t\＃ |
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| \％โE＇0 | ＜tz＇T | \％680 | Sot | \％ 29 ¢ | \＆\＆t | \％82＇0т | عโz＇т | \％しで 6 | 8TI＇T | \％50＇6 | 890＇T | \％t0 0 | โ | \％00＇0 | 0 | \％ 8999 | 298＇L | 008＇TI |  |
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| \％80 $\angle 1$ | 88L＇L9 | \％6ャ゙0 | 096＇工 | \％92＇t | ع¢6＇9t | \％00＇9 | 862＇tz | \％92＇z | ＜86＇0T | \％\＆゙＇6 | zss＇LE | \％IT＇0 | 92t | \％00＇0 | 0 | \％ 86.92 | 999＇908 | 92t＇868 |  |
| \％\＆¢ ${ }^{\text {¢ }}$ | 626＇s9 | \％ 5 ¢ 0 | 8T6＇โ | \％โモ＇t | Lzع＇st | \％ 290 | Toz＇z | $\%$ \％$\varepsilon^{\prime} 6$ | 6̧2＇$\varepsilon$ ¢ | \％tb＇8 | 080＇0¢ | \％60＇0 | เธ | \％00\％ | 0 | \％89＇9L | TLL＇ZLZ | 90＜＇¢98 |  |
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| \％0S＇zT | 28t＇5 | \％88＇0 | st | \％ 8 ＇$\varepsilon$ | 0т $\varepsilon$ | \％9t＇ | 88 I | $\%$ \％${ }^{\circ}$ \％ | 826 | \％EL＇L | ¢ 29 | \％00＇0 | 0 | \％00＇0 | 0 | \％$¢$＇ $2 L$ | 808＇L | ESt＇6 |  |
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| \％LD＇s | szz＇s | \％てざ「 | T88＇t | \％巾t＇ot | L28＇6 | \％zo＇z | 896＇工 | \％S9＇zi | 6z＇̇＇ | \％LL＇8 | \＆ヶc＇s | \％00\％ 0 | ז | \％00\％ 0 | 0 | \％00＇ 99 | $88 \varepsilon$＇$¢$ | 9とず 26 | Sudar lyW 10 」つ 0 T\＃ |
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| $\% 28{ }^{\circ}$ | OS6＇st | \％ 29 ¢ | 950＇0t | \％$\%$ T8 ${ }^{\text {L }}$ | $9 \mathrm{~Tb}^{\prime} \tau \mathrm{L}$ | \％8＜＇st | \＆ıて＇\＆t | \％TL＇08 | かtて＇t8 | \％88＇s | \＆くt＇レ | \％00\％ | 9 | \％00\％ | 0 | \％92＇98 | ${ }^{\text {to8＇00 }}$ | 88て＇† $\downarrow 2$ |  |
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| \％\％ $0^{\circ} \mathrm{OL}$ | 2カt＇t | $\%<60$ | 9 Tz | \％ 59 ＇s | \＆¢z＇t | \％09＇2 | ${ }^{9<9}$ | \％0902 | ZLS＇t | \％08＇L | 0¢L＇土 | \％00\％ | 0 | \％00＇0 | 0 | \％88＇z9 | 2¢8＇$\frac{1}{}$ | 68 T＇z2 |  |
|  | 086＇z | \％I8＇$\tau$ | ${ }^{\text {p62 }}$ | \％26＇2 | $t<t$ | \％68＇t | TTL | \％08＇$\varepsilon$ | EST＇s | \％ZL＇6 | SLS＇T | \％00＇0 | 0 | \％00＇0 | 0 | \％98＇6t | 666＇L | 90z＇9 |  |
|  | 8zz＇L | \％さでて | 000＇t | \％69＇t | $98 \varepsilon^{\prime}$＇ | \％¢8＇st | L88＇L | \％68＇9 | 29t＇8 | \％99＇6 | S92＇t | \％00＇0 | 0 | \％00\％ 0 | 0 | \％zを＇Ts | 029＇sz | sz8＇6b |  |
| \％¢¢＇$\dagger$ ¢ | zss＇9 | \％$\%$＇$\tau$ | 988 | \％01＇t | LtI＇z | \％8t＇ 62 | 2ャع＇$¢$ | \％6t＇0 | $z z 2$ | \％Ss＇8 | 206＇$\varepsilon$ | \％00＇0 | 0 | \％00＇0 | 0 | \％92＇ss | 892＇SZ | ZzL＇St | suooduイ¢ |
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| IdN ON ${ }^{\text {Jab }}$ |  |  |  | m！elo uo วaठ Kıu0 |  | xa pue SЈdО |  |  |  |  |  | ${ }^{26 \%}$ |  | дəриәэ |  |  |  |  |  |
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| \％00＇9 | ${ }^{6\llcorner\varepsilon}$ | \％で「 | 88 | \％88＇S |  | \％S8＇${ }^{\text {TI }}$ | ＜ 21 | \％巾6＇TI | 2tL | \％66 9T | 990＇T | \％ 200 | 「 | \％00\％ | 0 | \％โ¢ $2 ¢$ | ZSて＇ | ＜tz＇9 |  |
| \％ 99 ＇s | t62 | \％80＇z | $20 \tau$ | \％ZT＇L | L98 | \％カて＇6 | TLt | \％90＇6T | 286 | \％$¢$ İて | †¢9 | \％00\％ 0 | 0 | \％00＇0 | 0 | \％82＇09 | 069＇z | Tst＇s |  |
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| \％$\%$＇st | ¢8T＇8z | \％S6＇ | LT9＇ | \％历t＇$\varepsilon$ | 699＇s | \％Sz＇$\varepsilon$ ¢ | ${ }^{676} 69$ |  |  | \％z0＇L | £99＇ż | \％00\％ | 0 | \％00＇0 | 0 | \％ 89 ＇ts | 86t＇86 | 962＇08 |  |
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| \％92＇L | 200＇L | \％ 280 | 608 | \％ 56 ＇ | ${ }^{088}$＇乙 | \％62＇0 | SLL | \％z8＇ย | ยт¢＇\＆！ | \％86＇t | 698＇t | \％00＇0 | $\varepsilon$ | \％00＇0 | 0 | \％ot＇＜L | ＜\＆t＇SL | 98L＇L6 |  |
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| \％8て＇L | tzL＇9 |  |  | \％ IT ＇S | 8tL＇t |  |  |  |  | \％ธゅ＇\＆¢ | 262＇68 | \％to 0 | 9 | \％00＇0 | 0 | \％Lゆ＇Tt | ZLZ＇88 | ${ }^{\text {882＇z6 }}$ |  |
| \％zt＇s | тz9＇$\varepsilon$ |  |  | \％86＇ | 569＇6T |  |  |  |  | \％zL＇8 | \ll6＇zてI | \％t0 0 | zL | \％00＇0 | 0 | \％08＇8L | ¢LZ＇tTS | 608＇999 |  |
| \％6L＇TIT | 656＇L |  |  | \％$\%$＇s | To9＇$\varepsilon$ |  |  |  |  | \％＜L＇92 | TL9＇＜t | \％z0＇0 | عโ | \％00＇0 | 0 | \％6t＇89 | 0tz＇9t | \＆TS＇L9 |  |
| \％ 6 C＇ 2 T | тz9＇$¢$ |  |  | \％＜L＇9 | TL6＇9 |  |  |  |  | \％os＇ob | 8T9＇2て | \％t0 0 | 6 | \％00＇0 | 0 | \％86＇zs | E0＜＇Ss | ¢Ez＇S0T |  |
| \％\＆t＇$¢$ | 906＇ZT |  |  | \％とでも | 690＇t |  |  |  |  | \％06602 | 880＇02 | \％t0＇0 | ธT | \％00＇0 | 0 | \％ 28 ＇tL | ts6＇TL | LOT＇96 |  |
| \％ 28 ＇s | £もモ＇LL |  |  | \％T0＇$\varepsilon$ | 929＇68 |  |  |  |  | \％6て＇68 | 68S＇SLI＇T | \％t0＇0 | ＜$\downarrow$ T | \％00＇0 | 0 | \％0L＇L | ゅてع＇т0т | カヵS＇9te＇t |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ขıeכ ә＾！leıadouad |
| \％IT＇tI | عז̌＇0т | \％ 99 ＇s | $96 \square^{\prime} \mathrm{S}$ | \％20＇s | OT9＇t | \％で＇8 | 09t＇L | \％09＇9 | โ\＆8＇Zヵ | \％ちS＇z | z\＆์＇z | \％00＇0 | ${ }^{\text {I }}$ | \％00＇0 | 0 | \％00＇z\＆ | 94t＇62 | S06＇t6 |  |
| \％です | ＜so＇zt | \％94＇t | ع0＜＇s | \％Zs＇$\varepsilon$ | Tos＇t | \％00＇tz | ع＜8＇92 | \％てL＇00 | 8tt＇zs | \％ 20 ＇T | \＆டย＇ธ | \％99\％ | L＋8 | \％00＇0 | 0 | \％ tr ＇6z | 008＇$\llcorner$ | โ86＇L2T |  |
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| IdN ${ }^{\text {N }}$ Joid |  | ＜0．10 | pue כaठ KıuO | แ！eŋ | ग0\％KıuO | Xa pue | वОН |  |  | SОdОН |  | ${ }^{26} \mathrm{H}$ |  | 1әриәэ |  |  |  |  |  |
|  | Odd ldN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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Note: MCMP and PGP pilot program participants are excluded from these reports (based on the final 2007 pilot participant list from ORDI). a An occurrence of a Quality-Data Code (QDC) on a claim - not necessarily a valid or appropriate use of Quality-Data Code
${ }^{\text {b }}$ Quality-Data Code Accepted = a valid PQRI code, used appropriately for a measure.


# Quality Data Code Only Claims Ad Hoc Report <br> Final PQRI 2007 Report I ncludes Data from the J uly 2007 through <br> February 2008 TAP Files 

| Measure |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |


| Measure | \# QDC Reported | \# Reports on QDC Only Claims | \% of QDCs Reported | \# Denom on Different Claim | \% of QDC Only Claims | \# Matches Denom and QDC Only | \% of QDC Only Claims |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \#38 Hematocrit Level | 91,438 | 16,787 | 18.36\% | 973 | 5.80\% | 23 | 0.14\% |
| Fall Risk |  |  |  |  |  |  |  |
| \#4 Screening for Future Fall Risk | 415,641 | 32,227 | 7.75\% | 22,555 | 69.99\% | 3,967 | 12.31\% |
| GERD |  |  |  |  |  |  |  |
| \#60 Assessment for Alarm Symptoms | 45,722 | 2,983 | 6.52\% | 787 | 26.38\% | 39 | 1.31\% |
| \#61 Upper Endoscopy for Patients with Alarm Symptoms | 49,825 | 3,436 | 6.90\% | 803 | 23.37\% | 40 | 1.16\% |
| \#62 Biopsy for Barrett's Esophagus | 16,206 | 768 | 4.74\% | 225 | 29.30\% | 8 | 1.04\% |
| \#63 Barium Swallow - Inappropriate Use | 22,189 | 1,469 | 6.62\% | 520 | 35.40\% | 26 | 1.77\% |
| Primary Open Angle Glaucoma |  |  |  |  |  |  |  |
| \#12 Optic Nerve Evaluation | 643,317 | 40,054 | 6.23\% | 24,769 | 61.84\% | 463 | 1.16\% |
| Heart Failure |  |  |  |  |  |  |  |
| \#5 ACE Inhibitor or ARB Therapy for LVSD | 274,238 | 31,472 | 11.48\% | 2,951 | 9.38\% | 94 | 0.30\% |
| \#8 Beta-Blocker Therapy for LVSD | 463,334 | 45,220 | 9.76\% | 3,017 | 6.67\% | 88 | 0.19\% |
| Imaging Stroke |  |  |  |  |  |  |  |
| \#10 CT or MRI Reports | 97,436 | 11,258 | 11.55\% | 4,209 | 37.39\% | 175 | 1.55\% |
| \#11 Carotid Imaging Reports | 28,644 | 2,230 | 7.79\% | 1,182 | 53.00\% | 57 | 2.56\% |
| Chronic Lymphocytic Leukemia (CLL) |  |  |  |  |  |  |  |
| \#70 Baseline Flow Cytometry | 9,453 | 355 | 3.76\% | 203 | 57.18\% | 8 | 2.25\% |
| Macular Degeneration |  |  |  |  |  |  |  |
| \#13 Age-Related Eye Disease Study (AREDS) Prescribed/Recommended | 355,706 | 17,245 | 4.85\% | 8,260 | 47.90\% | 216 | 1.25\% |
| \#14 Dilated Macular Examination | 398,126 | 18,913 | 4.75\% | 9,422 | 49.82\% | 220 | 1.16\% |
| Myelodysplastic Syndrome (MDS) and Acute Leukemias |  |  |  |  |  |  |  |
| \#67 Baseline Cytogenetic Tesing Performed on Bone Marrow | 11,800 | 538 | 4.56\% | 278 | 51.67\% | 13 | 2.42\% |
| \#68 Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy | 12,182 | 949 | 7.79\% | 335 | 35.30\% | 8 | 0.84\% |
| Medication Reconciliation |  |  |  |  |  |  |  |
| \#46 Medication Reconciliation | 41,001 | 1,232 | 3.00\% | 747 | 60.63\% | 167 | 13.56\% |
| Melanoma |  |  |  |  |  |  |  |
| \#25 Patient Medical History | 36,501 | 2,886 | 7.91\% | 657 | 22.77\% | 58 | 2.01\% |
| \#26 Complete Physical Skin Examination | 36,465 | 3,073 | 8.43\% | 668 | 21.74\% | 54 | 1.76\% |
| \#27 Counseling on Self-Examination | 35,287 | 3,295 | 9.34\% | 746 | 22.64\% | 32 | 0.97\% |
| Multiple Myeloma |  |  |  |  |  |  |  |
| \#69 Treatment with Bisphosphonates | 8,478 | 409 | 4.82\% | 213 | 52.08\% | 6 | 1.47\% |
| Myocardial Infarction |  |  |  |  |  |  |  |
| \#28 Aspirin at Arrival | 19,424 | 362 | 1.86\% | 127 | 35.08\% | 9 | 2.49\% |
| \#29 Beta-Blocker at Time of Arrival | 6,764 | 174 | 2.57\% | 46 | 26.44\% | 3 | 1.72\% |
| Osteoporosis |  |  |  |  |  |  |  |
| \#24 Osteoporosis: Communication with the Physician Managing Ongoing Care Post Fracture | 7,208 | 1,512 | 20.98\% | 82 | 5.42\% | 2 | 0.13\% |


| Measure | \# QDC Reported | \# Reports on QDC Only Claims | \% of QDCs Reported | \# Denom on Different Claim | \% of QDC Only Claims | \# Matches Denom and QDC Only | \% of QDC Only Claims |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \#39 Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older | 325,077 | 35,922 | 11.05\% | 18,256 | 50.82\% | 766 | 2.13\% |
| \#40 Osteoporosis: Management Following Fracture | 466,489 | 35,926 | 7.70\% | 92 | 0.26\% | 6 | 0.02\% |
| \#41 Osteoporosis: Pharmacologic Therapy | 127,981 | 10,204 | 7.97\% | 519 | 5.09\% | 18 | 0.18\% |
| \#42 Counseling for Vitamin D, Calcium Intake, and Exercise | 91,905 | 9,806 | 10.67\% | 464 | 4.73\% | 12 | 0.12\% |
| Perioperative Care |  |  |  |  |  |  |  |
| \#20 Timing of Antibiotic Prophylaxis Ordering Physician | 1,316,544 | 39,626 | 3.01\% | 3,552 | 8.96\% | 298 | 0.75\% |
| \#21 Selection of Prophylactic Antibiotic <br> - First OR Second Generation Cephalosporin | 96,107 | 4,069 | 4.23\% | 3,008 | 73.92\% | 205 | 5.04\% |
| \#22 Discontinuation of Prophylactic Antibiotics (Non-Cardiac Procedures) | 105,235 | 6,911 | 6.57\% | 2,907 | 42.06\% | 185 | 2.68\% |
| \#23 VTE Prophylaxis | 67,513 | 3,601 | 5.33\% | 2,316 | 64.32\% | 90 | 2.50\% |
| \#30 Timing of Prophylactic Antibiotic Administering Physician | 656,809 | 19,595 | 2.98\% |  | 0.00\% |  | 0.00\% |
| \#45 Discontinuation of Prophylactic Antibiotics | 92,284 | 4,718 | 5.11\% | 1,080 | 22.89\% | 81 | 1.72\% |
| Pharyngitis |  |  |  |  |  |  |  |
| \#66 Appropriate Testing for Children | 43 | 6 | 13.95\% |  | 0.00\% |  | 0.00\% |
| Pneumonia |  |  |  |  |  |  |  |
| \#56 Vital Signs for CommunityAcquired Bacterial Pneumonia | 133,991 | 3,770 | 2.81\% | 1,136 | 30.13\% | 114 | 3.02\% |
| \#57 Assessment of Oxygen Saturation for Community-Acquired Bacterial Pneumonia | 179,396 | 4,501 | 2.51\% | 1,292 | 28.70\% | 96 | 2.13\% |
| \#58 Assessment of Mental Status for Community-Acquired Bacterial Pneumonia | 126,179 | 3,241 | 2.57\% | 945 | 29.16\% | 80 | 2.47\% |
| \#59 Empiric Antibiotic for CommunityAcquired Bacterial Pneumonia | 97,786 | 3,189 | 3.26\% | 1,085 | 34.02\% | 41 | 1.29\% |
| Radiation Therapy (RT) |  |  |  |  |  |  |  |
| \#74 RT Recommended for Invasive Breast Ca Patients with Breast Conserving Surgery | 8,464 | 683 | 8.07\% | 218 | 31.92\% | 10 | 1.46\% |
| Retinopathy |  |  |  |  |  |  |  |
| \#18 Diabetic Retinopathy: <br> Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy | 180,296 | 9,186 | 5.09\% | 2,740 | 29.83\% | 100 | 1.09\% |
| \#19 Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care | 246,935 | 15,954 | 6.46\% | 3,190 | 19.99\% | 111 | 0.70\% |
| Stroke and Stroke Rehabilitation |  |  |  |  |  |  |  |
| \#31 DVT Prophylaxis for Ischemic Stroke or Intracranial Hemorrhage | 6,419 | 534 | 8.32\% | 210 | 39.33\% | 9 | 1.69\% |
| \#32 Discharged on Antiplatelet Therapy | 8,428 | 609 | 7.23\% | 262 | 43.02\% | 6 | 0.99\% |
| \#33 Anticoagulant Therapy Prescribed for Afib at Discharge | 2,531 | 175 | 6.91\% | 70 | 40.00\% | 18 | 10.29\% |


| Measure | \# QDC Reported | \# Reports on QDC <br> Only Claims | \% of QDCs <br> Reported | \# Denom on Different Claim | \% of QDC Only Claims | \# Matches Denom and QDC Only | \% of QDC Only Claims |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \#34 t-PA Considered | 5,587 | 347 | 6.21\% | 144 | 41.50\% | 8 | 2.31\% |
| \#35 Screening for Dysphagia | 5,151 | 474 | 9.20\% | 181 | 38.19\% | 5 | 1.05\% |
| \#36 Consideration of Rehabilitation Services | 6,217 | 429 | 6.90\% | 202 | 47.09\% | 6 | 1.40\% |
| Syncope |  |  |  |  |  |  |  |
| \#55 ECG Performed for Syncope | 588,789 | 9,310 | 1.58\% | 1,030 | 11.06\% | 71 | 0.76\% |
| Upper Respiratory Infection |  |  |  |  |  |  |  |
| \#65 Appropriate Treatment for Children | 28 | 4 | 14.29\% | 1 | 25.00\% |  | 0.00\% |
| Urinary Incontinence |  |  |  |  |  |  |  |
| \#48 Assessment of Presence or Absence of UI in Women Aged 65 Years and Older | 114,520 | 11,027 | 9.63\% | 5,183 | 47.00\% | 198 | 1.80\% |
| \#49 Characterization of UI in Women Aged 65 Years and Older | 35,624 | 1,800 | 5.05\% | 316 | 17.56\% | 17 | 0.94\% |
| \#50 Plan of Care for UI in Women Aged 65 Years and Older | 33,802 | 1,884 | 5.57\% | 345 | 18.31\% | 10 | 0.53\% |
| TOTAL | 14,089,837 | 884,720 | 6.28\% | 290,357 | 32.82\% | 20,987 | 2.37\% |


[^0]:    ${ }^{1}$ In 2005 CMS developed a voluntary quality reporting program, the PVRP, to encourage physicians to report quality information. PQRI, which was authorized by TRHCA in 2006 and is a separate program, builds on the PVRP by linking payment to reporting quality information.
    ${ }^{2}$ A statutorily defined payment cap that would reduce the potential incentive below 1.5 percent of allowed charges may apply in situations where an EP reported relatively few instances of quality measure data. The cap was eliminated by Congress after the 2007 PQRI.

[^1]:    ${ }^{3}$ A remittance advice is a notice of payments and adjustments sent to Medicare providers, billers, and suppliers. The remittance advice message noted would have been sent regardless of whether or not the claim contained an NPI in 2007.

