

**Terms and Conditions**  
**Premier, Inc., Hospital Quality Incentive Demonstration**

Preamble: The purpose of the demonstration is to determine the effectiveness of economic incentives targeted toward improving the quality of inpatient care. In this demonstration, the Centers for Medicare & Medicaid Services (CMS) will measure and pay incentives for high quality inpatient care among a group of hospitals that participate in the Perspective Online™ quality measurement system (Perspective), and predecessor hospital performance measurement and reporting systems, operated by Premier, Inc. (Premier, the awardee). Incentives will include both favorable mention by CMS on the *www.cms.hhs.gov* Web site and financial bonuses. The information provided through this demonstration can be useful for patient decision making about the providers from which they seek health care and will be a model for the provider community in highlighting the types of information that could be made available through broader voluntary cooperation.

1. Hospitals in the demonstration. Premier will propose a group of hospitals for the Hospital Quality Incentive (HQI) Demonstration from among the approximately 550 hospitals in the Perspective system as of March 31, 2003. Once both parties sign these terms and conditions, Premier will have a 90-day period to recruit hospitals for the demonstration from this group. A participating hospital must have a minimum sample of 30 cases in a measured clinical quality area for a hospital to be eligible for a quality incentive bonus in that area in a given year. A hospital must join the demonstration for all clinical areas in which it has the required minimum number of cases and may not exclude some areas for which it has the minimum number of cases.

CMS reserves the right to disapprove the enrollment of any hospital proposed for participation by Premier. Hospitals that are found to have serious accounting irregularities, including significant Medicare outlier payment problems, will not be eligible for participation in the demonstration and/or may be removed by CMS from participation at any time. Premier will propose a list of hospitals to join the HQI demonstration after the 90-day recruitment period, and CMS will respond with a list of hospitals that it agrees to include in the demonstration.

2. Start date and operational period. Once both parties sign these terms and conditions, there will be a development and launch period of 90 days. During this period, Premier will recruit hospitals and develop an implementation plan, and both parties will prepare for implementation. The operational period consists of the period during which patients whose quality of care is being measured are discharged in participating hospitals. The start date is planned to be October 1, 2003. The start date may be altered by mutual consent of the parties. The demonstration will operate for 3 years.

3. Quality of care data. During the demonstration, Premier will send data on the quality of care provided by the participating hospitals to CMS or its agent, the Standard Data Processing Systems (SDPS) Clinical Warehouse. The data will be on quality of care for all inpatients, with the exception of the hip and knee replacement clinical area, which will reflect data on Medicare inpatients only.
4. Data submission. Premier will submit individually identifiable case data to the SDPS Clinical Warehouse for all hospitals in the demonstration on a quarterly basis. SDPS will be the agent of CMS in this demonstration. This is a secure database capable of accepting ORYX data for the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), data collected with the CMS tool, or any other data conforming to specifications published by CMS. Data in this warehouse are considered Quality Improvement Organization (QIO) data and therefore, confidential and maintained and managed by a QIO subcontractor. Data will be submitted using secure data transmission techniques through the Internet. Data from this warehouse will be aggregated at the hospital level for purposes of reporting. No identifiable patient data will be reported in this process. Data from this demonstration project may only be used for this demonstration project and not for any other purposes unless mutually agreed upon by both parties or unless required by law.
5. Data audits. The quality data for all of the hospitals in the demonstration will be verified by Premier and then forwarded to CMS. All case data submitted to the SDPS Clinical Warehouse are subject to sub-sampling and chart audit validation by CMS. The Clinical Data Abstraction Centers will perform the chart audit validation. Cases selected for chart audit validation will be re-abstracted using the CMS tool, and the results of this abstraction will be compared to the original abstraction submitted by the hospital. Hospitals where 90 percent or more of the elements agree for all cases reviewed will be considered to be reporting valid data. At this time, CMS plans to audit five cases per hospital per quarter, or twenty per year, for all clinical areas combined. Only hospitals submitting valid data will be permitted to participate in the demonstration. Hospitals submitting invalid data will be excluded from publication on *www.cms.hhs.gov* and excluded from potential quality incentive awards. Data will be audited prior to payment of incentives or any payment reduction adjustments, based on existing audit protocols. The audit process will require 3 to 4 months' time after the data are submitted by the hospitals.
6. Clinical areas and measures included. Clinical areas included in the demonstration are acute myocardial infarction (AMI), coronary artery bypass graft (CABG), heart failure (HF), community acquired pneumonia (CAP), and hip and knee replacement (see table 1).

7. Quality scores. Each demonstration hospital with an adequate sample size (defined in Term 1) for a given clinical condition will be scored for quality. Separate scores will be calculated for each clinical condition. Premier will calculate the scores for each hospital and clinical area and share the data and calculations with CMS for review and verification. Using this process, CMS will define the hospitals into deciles for each condition. The scores will be calculated using the opportunity model as defined by Qualidigm for the Connecticut QIO (see Appendix A). CMS will use a method to combine outcome measures with the process measures into an overall quality score and will define deciles using this combined methodology. The scores will be calculated at least semi-annually.
8. Review and reconsideration of scores. Each demonstration hospital may obtain information about how the clinical scores for their hospital were calculated and may ask for reevaluation and reconsideration of its quality scores. Any hospital that obtains payment adjustments due to relatively lower quality scores has 30 days from the time that it learns of its scores to request a reconsideration. Premier and CMS will collaborate in evaluating the scores. The review and reconsideration will be completed and communicated with the hospital before any payment reduction adjustment is made.
9. Bonus incentive payments. For each of the clinical areas, CMS will pay a bonus for the hospitals with the best clinical quality scores. For the top decile hospitals, the bonus will be 2 percent of the Diagnosis Related Group (DRG)-based prospective payment for the patients in the measured condition for all Medicare fee for service (FFS) beneficiaries. Hospitals in the second decile will be paid a bonus incentive of 1 percent of the DRG based prospective payment amount. The DRG-based prospective payment consists of the operating and capital prospective payment for each Medicare FFS case, as adjusted for local costs. The DRG payment does not include payments for disproportionate share hospitals, indirect medical education, or any pass-through payments such as direct graduate medical education. It does not include outlier payments. Incentive payments will be made annually in a lump sum. CMS will calculate these payments using data from the National Claims History (NCH) data file as it exists immediately following the determination of the hospitals that are to be awarded bonus payments. CMS will not recalculate bonus payments due to any modifications in the NCH following the bonus calculation. For hospitals not paid using the DRG-based prospective payment system, CMS will calculate a bonus (or payment adjustment reduction in year three) when appropriate using a simulation of DRG-based payments.
10. Payment of Incentives. The Medicare program will pay bonuses to the individual high quality hospitals after the incentive payments are calculated. The funds will come from the Medicare Part A Health Insurance Trust Fund. The Fiscal Intermediaries will make any quality incentive payments to the hospitals in the year following the inpatient care that is being evaluated, after the data is verified and the incentive bonus payments are calculated.

11. Payment Adjustments for Performance in Year Three Based on Distribution in Baseline Year to Recognize Improvement. In the third year of the demonstration, demonstration hospitals will receive lower payments for any clinical conditions in which they do not achieve quality scores above an established performance baseline. The payment reductions will be calculated using the DRG-based prospective payment amount for the measured condition (see Term "Bonus incentive payments" above for definition). The baseline threshold for applying the adjustment for performance in the third year is defined by the performance of hospitals in the lowest two deciles during the baseline year, defined as the first year. At the conclusion of the third year, DRG payments for that year for each condition will be reduced by 1 percent for hospitals that do not improve their performance above the 9<sup>th</sup> decile baseline level of performance for that condition among hospitals in the baseline year, and 2 percent for hospitals that do not improve their performance above the 10<sup>th</sup> decile baseline level of performance for that condition among hospitals in the first year. (See Appendix B for example.) Thus, hospitals will be motivated to improve as well as hold the gains made during the years of the demonstration project. There will be no reduction in payment to any hospitals in years one or two of the demonstration.
  
12. Publication of quality data on Web site. CMS will publish the results of the demonstration for each clinical condition included in the project. Each demonstration hospital will be listed on the CMS Web site. For each condition, all of the hospitals in the top 50 percent of hospitals will be listed, with the quality measurements associated with each measured clinical condition for hospitals considered to be top performers. Those hospitals in the top or second deciles will be identified for recognition of their high quality. The lists will be in alphabetical order. Hospitals in the bottom 50 percent for a given clinical area will not be listed. The lists will be on the *www.cms.hhs.gov* Web site. In addition, Premier generates a list of "Top Performing" hospitals using a different methodology than that used in the CMS demonstration. Hospitals performing in the top half among all HQI demonstration project participants for each clinical condition that are also identified as top performing through the Premier methodology will be noted as such on the *www.cms.hhs.gov* Web site. Historical quality data for the demonstration hospitals will be published on the Web site for the year prior to the start of demonstration operations. The published data will be for the measures used in the demonstration, but the published data will be based on already available data, and hospitals will not be required to gather additional historical data from the period prior to the start of the demonstration.

### **Standard Terms and Conditions for Medicare Demonstrations**

13. Early termination of project. CMS may suspend or terminate operations at any demonstration site at any time before the date of expiration if it determines that Premier has materially failed to comply with the terms of the award. CMS will give notice of noncompliance problems and will give Premier an opportunity to remedy the problem. CMS will promptly notify Premier in writing of the

determination and the reasons for the suspension or termination, together with the effective date.

The Government reserves the right to withdraw this award at any time if it determines that continuing the demonstration project at a given site or in whole is no longer in the public interest.

Premier has the right to withdraw from this demonstration, as do the individual demonstration hospitals. If Premier withdraws, Premier will send a letter to the project officer explaining the reasons for the withdrawal. Demonstration hospitals may withdraw if they notify CMS and Premier of their withdrawal prior to the beginning of the operating year.

14. Evaluation. CMS intends to hire an independent evaluation contractor to study this demonstration program. Premier and demonstration hospitals agree to fully cooperate in the collection of data by CMS, its auditors, or evaluation contractors. Premier and demonstration hospitals will provide access to routinely collected data including encounter data, claims data, medical records, administrative records, and payment records at no cost to the evaluator. Premier and demonstration hospitals will also cooperate with the evaluation contractor in other data collection efforts such as surveys and interviews of staff at no cost to the evaluator and will make copies of materials and data as needed. Access to site personnel and on-site reviews by the evaluator will be done on reasonable notice and at times that are convenient to all parties. CMS will not make additional payments to Premier or the demonstration hospitals for any costs incurred due to research and evaluation.
15. Implementation plan and resources. Premier will submit an implementation plan to the CMS project officer for approval, including any revisions to its proposal, within 90 days of the date of agreement on the terms and conditions of the demonstration. The plan will include plans for assessing and implementing needed changes in data systems and an operating protocol. The plan will include a discussion of how Premier will implement any management and staffing needs of the demonstration. Premier will make adequate resources available for the implementation of this demonstration at its site.
16. Demonstration phase out. As part of the implementation plan, Premier must provide a plan to phase down and conclude the demonstration. At a minimum, this plan must include the manner in which beneficiaries will be told of the conclusion of the demonstration. When the demonstration is concluded, the participating hospitals will revert to standard Medicare payment rules.
17. Marketing. Any marketing to Medicare beneficiaries done by Premier that references the demonstration must be factually accurate, clear, and must avoid misrepresenting any policies of CMS. Courtesy copies of any material used by Premier to market to Medicare beneficiaries regarding the demonstration or that

references the demonstration should be sent to the CMS project officer and must be retained for possible future inspection in the files of Premier. The CMS project officer will not require that Premier seek prior permission to use marketing materials unless he/she determines that there are problems in the prior materials from Premier. The CMS project officer will inform Premier of any observed problems in marketing materials and request changes in those materials. For guidance regarding language that CMS determines to be accurate in marketing to beneficiaries, Premier may consult the chart on marketing language in the Medicare Managed Care National Marketing Guide.

18. Progress reports. Progress reports will begin after the signing of these terms and conditions. Premier will submit written progress reports no later than 30 days from the end of each calendar quarter. The report will include information about the demonstration accomplishments and problems, the costs of operating the demonstration, and the effects of the demonstration on Medicare beneficiaries. The report will access available data using Premier's report systems to give a synopsis of any issues related to quality of care and other clinical and administrative operations of Premier. The report will include Premier's comments on the demonstration activities during the quarter. The report will consolidate any reports or comments from the hospitals in the demonstration.
19. Final report. A draft final report will be submitted to the CMS project officer for comments within 90 days of the end of the operating period. The CMS project officer's comments should be taken into account by Premier for incorporation in the final report, but CMS does not claim a right to direct Premier to make any particular interpretation or conclusion. The CMS project officer will give guidelines to Premier for the preparation of the report. The final report is due no later than 30 days after Premier receives comments from the CMS project officer. CMS will make the report public after the CMS Project Officer approves it. The final report or any other report supported by this demonstration will note the support of CMS for the project and will contain a disclaimer that the opinions expressed are those of the authors and do not necessarily represent the opinions of CMS.
20. Public release of information. During the demonstration project and for 6 months after the completion of the project, Premier shall notify the CMS project officer prior to formal presentation of any report or any analytical material based on information obtained through this award. Formal presentation includes papers, articles, professional publications, speeches, and testimony. In the course of this research, whenever Premier determines that a significant new finding has been developed, Premier will immediately communicate it to the CMS project officer before formal dissemination to the general public. Premier is requested, as a courtesy, to submit a copy of any reports or papers coming from this project to the CMS project officer even after the 6-month period after project completion.

21. Confidentiality of patient information. As part of the implementation plan, Premier shall develop and submit plans to protect the confidentiality of all project-related information that identifies individuals. (These plans may be identical to policies already developed by the participating hospitals and Premier.) The plan must specify that such information is confidential, that it may not be disclosed directly or indirectly except for purposes directly connected with the conduct of the project, and that informed written consent of the individual must be obtained for any other disclosure. Note that Premier may be requested for such information by CMS agents and evaluation contractors and that such requests are directly connected with the conduct of the project and will remain confidential under the terms of agreements with CMS agents and evaluation contractors.
  
22. Demonstration program modifications. If CMS makes any modifications in the demonstration because of operational or policy issues, Premier will be informed in writing of those modifications.

## Clinical Conditions and Measures for Reporting and Incentives

The CMS/Premier quality measures are based on clinical evidence and industry recognized metrics. For example, they include:

- All 10 indicators from the starter set of “The National Voluntary Hospital Reporting Initiative: A Public Resource on Hospital Performance.” (AHA Initiative)
- Twenty-seven indicators from the National Quality Forum (NQF).
- Twenty-four indicators from CMS 7<sup>th</sup> Scope of Work.
- Fifteen indicators from JCAHO Core Measures.
- Three indicators proposed by The Leapfrog Group.
- Four indicators from the Agency for Healthcare Research and Quality’s (AHRQ) patient safety indicators.

| Clinical Conditions                        | Measures  |
|--|---|
| <b>Acute Myocardial Infarction (AMI)</b>   | <ol style="list-style-type: none"> <li>1. Aspirin at arrival<sup>1,2,3,4,P</sup></li> <li>2. Aspirin prescribed at discharge<sup>1,2,3,4,P</sup></li> <li>3. ACEI for LVSD<sup>1,2,3,4,P</sup></li> <li>4. Smoking cessation advice/counseling<sup>1,2,3,P</sup></li> <li>5. Beta blocker prescribed at discharge<sup>1,2,3,4,P</sup></li> <li>6. Beta blocker at arrival<sup>1,2,3,4,P</sup></li> <li>7. Thrombolytic received within 30 minutes of hospital arrival<sup>1,2,10,P</sup></li> <li>8. PCI received within 120 minutes of hospital arrival<sup>1,5,10,P</sup></li> <li>9. Inpatient mortality rate<sup>1,3,6,O</sup></li> </ol> |
| <b>Coronary Artery Bypass Graft (CABG)</b> | <ol style="list-style-type: none"> <li>10. Aspirin prescribed at discharge<sup>5,P</sup></li> <li>11. CABG using internal mammary artery<sup>1,5,P</sup></li> <li>12. Prophylactic antibiotic received within 1 hour prior to surgical incision<sup>1,2,10,11,P</sup></li> <li>13. Prophylactic antibiotic selection for surgical patients<sup>1,2,10,11,P</sup></li> <li>14. Prophylactic antibiotics discontinued within 24 hours after surgery end time<sup>1,2,10,11,P</sup></li> <li>15. Inpatient mortality rate<sup>7,O</sup></li> <li>16. Post operative hemorrhage or hematoma<sup>8,O</sup></li> </ol>                              |

|   |   |
|---|---|
|   | 17. Post operative physiologic and metabolic derangement <sup>8,O</sup>   |
| <b>Heart Failure (HF)</b>                   | 18. Left ventricular function (LVF) assessment <sup>1,2,3,4,P</sup><br>19. Detailed discharge instructions <sup>1,2,3,P</sup><br>20. ACEI for LVSD <sup>1,2,3,4,P</sup><br>21. Smoking cessation advice/counseling <sup>1,2,3,P</sup>   |
| <b>Community Acquired Pneumonia (CAP)</b>   | 22. Percentage of patients who received an oxygenation assessment within 24 hours prior to or after hospital arrival <sup>1,2,3,4,P</sup><br>23. Initial antibiotic consistent with current recommendations <sup>1,2,10,P</sup><br>24. Blood culture collected prior to first antibiotic administration <sup>1,2,3,P</sup><br>25. Influenza screening/vaccination <sup>1,2,10,P</sup><br>26. Pneumococcal screening/vaccination <sup>1,2,3,4,P</sup><br>27. Antibiotic timing, percentage of pneumonia patients who received first dose of antibiotics within four hours after hospital arrival <sup>1,2,4,10,P</sup><br>28. Smoking cessation advice/counseling <sup>1,2,3,P</sup> |
| <b>Hip and Knee Replacement<sup>9</sup></b> | 29. Prophylactic antibiotic received within 1 hour prior to surgical incision <sup>1,2,9,10,11,P</sup><br>30. Prophylactic antibiotic selection for surgical patients <sup>1,2,9,10,11,P</sup><br>31. Prophylactic antibiotics discontinued within 24 hours after surgery end time <sup>1,2,9,10,11,P</sup><br>32. Post operative hemorrhage or hematoma <sup>8,9,O</sup><br>33. Post operative physiologic and metabolic derangement <sup>8,9,O</sup><br>34. Readmissions 30 days post discharge <sup>9,O</sup>  |

<sup>1</sup> National Quality Forum measure

<sup>2</sup> CMS 7<sup>th</sup> Scope of Work measure

<sup>3</sup> JCAHO Core Measure

<sup>4</sup> The National Voluntary Hospital Reporting Initiative (AHA Initiative)

<sup>5</sup> The Leapfrog Group proposed measure

<sup>6</sup> Risk adjusted using JCAHO methodology

<sup>7</sup> Risk adjusted using 3M<sup>TM</sup> All Patient Refined DRG methodology

<sup>8</sup> AHRQ Patient Safety Indicators and risk adjusted using AHRQ methodology.

<sup>9</sup> Medicare beneficiaries only

<sup>10</sup> CMS and/or JCAHO to align with this measure in 2004

<sup>11</sup> Surgical Infection Prevention (SIP) measure

<sup>P</sup> Process measure

<sup>O</sup> Outcomes measure

## Appendix A

### Summary of the Composite Quality Scoring Methodology

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#### Identifying top performers

- CMS will use a *Composite Quality Index* to identify the top performing hospitals participating in the Hospital Quality Incentive (HQI) Demonstration Project.
- The Composite Quality Index will identify hospitals that are performing in the top two deciles and establish the baseline thresholds for adjustment for Year 3 of the HQI demonstration project.
- The Composite Quality Index for focus areas with outcomes measures is comprised of two separate components:
  - 1) Composite Process Rate
  - 2) Risk-Adjusted Outcomes Index
- Focus areas without outcomes indicators use only the Composite Process Rate.

#### Calculating the Composite Process Rate

- Each of the five clinical focus areas in the project has a set of process-based indicators.
- The numerator values for each of the process-based indicators are summed to create a *composite numerator*.
- The denominator values are summed to create a *composite denominator*.
- The composite numerator is divided by the composite denominator to derive the overall *Composite Process Rate*.

#### Calculating the Risk-Adjusted Outcomes Index

- Three of the clinical focus areas have outcomes indicators.
- Both actual and risk adjusted outcomes indicators are stated in positive terms. For example a 5 percent mortality rate in AMI is converted to a 95 percent survival rate.
- The outcomes index is calculated by dividing a hospital's actual outcomes rate by its risk-adjusted outcomes rate, then multiplying by 100 to derive a percentage value.
  - For the AMI measure – inpatient mortality rate will be risk-adjusted using the Joint Commission's logistic regression method
    - The probabilities for each patient are averaged to create the total risk-adjusted mortality rate.
  - The remaining outcomes measures will also be risk-adjusted. These are the proposed risk adjustment methodologies.
    - CABG inpatient mortality rate – adjusted using 3M APR-DRG™.
    - Hip and Knee readmissions 30 days post discharge – adjusted using 3M APR-DRG.
    - CABG and Hip and Knee post-operative hemorrhage or hematoma, and postoperative physiologic and metabolic derangement – adjusted using risk-adjustment model designed specifically for AHRQ patient safety indicators.

#### Weighting the components

- To account for the relative contribution of each of the Composite Ranking Index components, proportional weighting values must be applied.
  - In AMI for example, the Composite Process Rate accounts for 8 of the 9 indicators, so a weighting factor of .89(8/9ths) is applied.
  - In the same example, the single indicator Risk Adjusted Outcomes Index for Mortality is weighted with a factor of .11(1/9th).
    - $Composite\ Quality\ Index = (0.89 * Composite\ Process\ Rate) + (0.11 * Risk\ Adjusted\ Outcomes\ Index)$

Updated October 21, 2003

This document is a summary only.

This is the methodology referred to in Section 7 and Appendix A of the Terms and Conditions. It replaces the Qualidigm/Connecticut QIO model referred to in those documents.

## Appendix B: Example of Calculating Payment Adjustments in Year Three

Suppose the overall distribution of scores for condition X in year 1 (baseline) and 3 is:

| Decile           | Baseline Threshold Score in Year 1 | Threshold Score in Year 3 |
|------------------|------------------------------------|---------------------------|
| 1 <sup>st</sup>  | 18                                 | 20                        |
| 2 <sup>nd</sup>  | 16                                 | 18                        |
| 9 <sup>th</sup>  | 4                                  | N.A.                      |
| 10 <sup>th</sup> | 2                                  | N.A.                      |

These hospitals achieve the following scores for condition X:

| Hospital | Year 1 |                   | Year 3 |                   |
|----------|--------|-------------------|--------|-------------------|
|          | Score  | Bonus/(Reduction) | Score  | Bonus/(Reduction) |
| A        | 18     | +2%               | 19     | +1%               |
| B        | 16     | +1%               | 17     | 0                 |
| C        | 10     | 0                 | 11     | 0                 |
| D        | 5      | 0                 | 7      | 0                 |
| E        | 3      | 0                 | 5      | 0                 |
| F        | 1      | 0                 | 3      | -1%               |

### Incentive Payments Examples

Hospitals throughout the distribution of participating hospitals improved their scores between years 1 and 3. Hospital A is among the top decile hospitals in year 1, and so receives a 2 percent incentive payment in that year. In year 3, hospital A has improved its performance, but not as much as the increase in the distribution among all hospitals, so its bonus is 1 percent in year 3. Hospital B similarly improves its score between years 2 and 3, but it receives no bonus in year 3 because that improvement has not matched the overall increase in the distribution of scores. Baseline thresholds do not affect quality bonus payments in any year. Hospitals C and D are in the middle of the distribution in both years, so they receive no incentive payments in either year and have no reduction applied in year 3.

### Payment Reduction Examples

Hospitals E and F are in the ninth and tenth deciles, respectively, in year 1, but there is no reduction in payments for hospitals at the bottom of the distribution in that year. In year 3, both hospitals improve their performance. Hospital E still receives the full DRG payment amount in year 3 although it may be in the bottom deciles among participating hospitals in that year, because it has improved its score so that it exceeds the baseline threshold for the ninth decile among participating hospitals in year 1. Hospital F experiences only a 1 percent reduction in its DRG payments in year 3 although it may be in the bottom decile among participating hospitals in that year, because its score exceeds the baseline threshold for the tenth decile among participating hospitals in year 1. Under this approach, hospitals are not penalized in the third year if they improve their scores

sufficiently to exceed the thresholds that defined performance for the lower two deciles in the baseline year.

(Note: The numbers in the examples are only for illustration. Actual quality scores will be calculated to several decimal points.)