

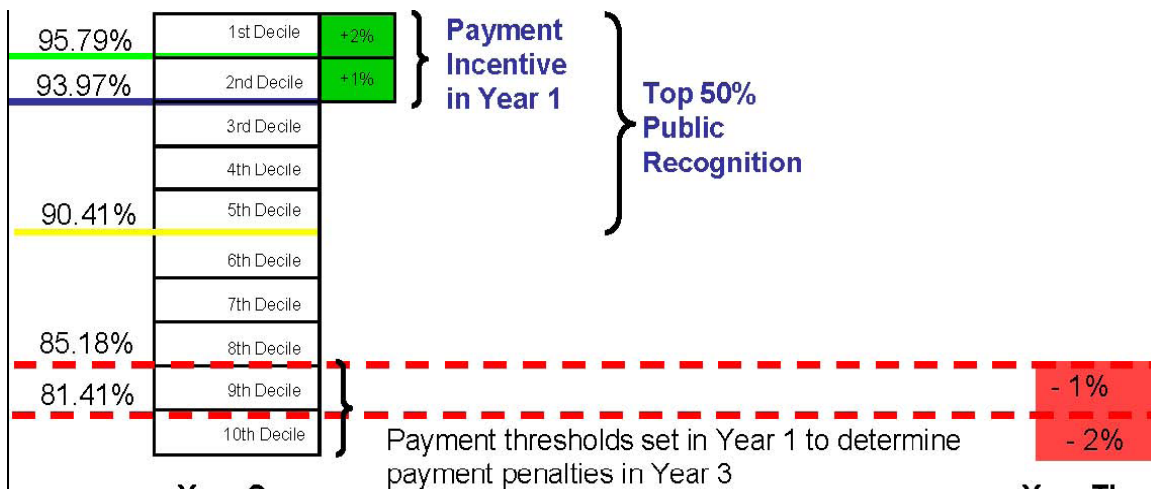
Hospital Quality Incentive Demonstration Project Thresholds

Year 1-3 Payment Information

Year 1 -3 AMI Payment Scenario

A decile threshold is the Composite Quality Score (CQS) that defines the upper limit of that particular decile. Note that there is no “upper limit” for decile 1, nor “lower limit” for decile 10. Each decile by definition contains 10% of the hospitals, so approximately the same numbers of hospitals are in each decile. This example shows the thresholds for Year 1 in the AMI clinical focus area. Note that in the first three years of the project (Year 1, Year 2, and Year 3) hospitals in the 1st decile were awarded a 2% incentive bonus on their Medicare payments for patients in that clinical area. Hospitals in the 2nd decile were awarded a 1% bonus. For Year 3, the thresholds for the 9th and 10th deciles were established at these values, based on Year 1 data. Any hospital whose CQS in Year 3 fell below the 9th decile threshold (would fall into the 10th decile as defined by Year 1) received a 2% penalty on their Medicare payments for patients in this clinical area. Hospitals whose CQS in Year 3 fell between the 8 and 9th decile threshold established in Year 1 received a 1% penalty.

Figure 1. Decile Threshold Example, AMI Year 1



Year 1 = October 2003 – September 2004

Year 3 = October 2005 – September 2006

Decile Thresholds

Following are the lower thresholds for each decile as defined by final Year 1 - 3 data. A hospital must score above the value listed to be in the next decile. For example, a hospital must be above the value listed in the 2nd decile field in order to be in the 1st decile.

Providers must have a score above the threshold to be in that decile.

Example: AMI for Year 3

1st decile providers CQS is above 99.2914%

2nd decile provides CQS is above 98.4064%

Decile Thresholds Year 1

AMI		HF		PN		CABG		Hip / Knee	
1st		1st		1st		1st		1st	
2nd	95.7993%	2nd	86.1458%	2nd	83.5178%	2nd	96.2956%	2nd	94.7840%
3rd	93.9746%	3rd	81.8452%	3rd	80.3158%	3rd	94.4749%	3rd	93.6343%
4th	93.0312%	4th	78.5714%	4th	77.8213%	4th	91.9715%	4th	92.1137%
5th	91.7770%	5th	75.3580%	5th	75.9481%	5th	89.0560%	5th	90.1044%
6th	90.4151%	6th	69.5991%	6th	74.6145%	6th	87.9009%	6th	88.2607%
7th	89.2355%	7th	65.6250%	7th	72.1841%	7th	85.5120%	7th	86.1856%
8th	87.6061%	8th	62.1512%	8th	70.1599%	8th	83.8319%	8th	83.6126%
9th	85.1781%	9th	57.8947%	9th	65.8009%	9th	81.4316%	9th	81.7377%
10th	81.4153%	10th	52.8193%	10th	63.1517%	10th	77.0183%	10th	78.6855%

Decile Thresholds Year 2

AMI		HF		PN		CABG		Hip / Knee	
1st		1st		1st		1st		1st	
2nd	97.6564%	2nd	93.8063%	2nd	90.5395%	2nd	98.7850%	2nd	98.2031%
3rd	96.7152%	3rd	90.3581%	3rd	88.6792%	3rd	98.0934%	3rd	97.1267%
4th	96.0115%	4th	87.7551%	4th	86.4831%	4th	97.6542%	4th	96.2283%
5th	94.8882%	5th	85.3968%	5th	85.4028%	5th	96.3105%	5th	95.3262%
6th	93.8202%	6th	81.9178%	6th	83.5366%	6th	94.7883%	6th	93.9114%
7th	92.6893%	7th	78.7097%	7th	82.3773%	7th	93.1537%	7th	92.2317%
8th	91.7722%	8th	74.1117%	8th	80.8219%	8th	91.1406%	8th	90.5970%
9th	89.4631%	9th	70.1677%	9th	78.5714%	9th	86.7501%	9th	87.1353%
10th	85.6730%	10th	62.7326%	10th	75.8868%	10th	82.4677%	10th	82.3636%

Decile Thresholds Year 3

AMI		HF		PN		CABG		Hip / Knee	
1st		1st		1st		1st		1st	
2nd	99.2914%	2nd	97.4619%	2nd	95.0000%	2nd	99.5246%	2nd	99.4478%
3rd	98.4064%	3rd	94.0937%	3rd	93.4161%	3rd	99.1338%	3rd	98.8390%
4th	97.6581%	4th	92.4342%	4th	92.2667%	4th	98.8148%	4th	98.3352%
5th	96.7819%	5th	90.3353%	5th	90.6217%	5th	98.2123%	5th	97.6898%
6th	96.1941%	6th	88.6928%	6th	89.2544%	6th	97.6570%	6th	96.8335%
7th	95.3829%	7th	85.8639%	7th	88.3420%	7th	96.7065%	7th	95.9449%
8th	94.2839%	8th	83.8305%	8th	87.1636%	8th	95.7070%	8th	94.6528%
9th	92.6033%	9th	80.2721%	9th	85.0141%	9th	93.9576%	9th	91.6362%
10th	90.4656%	10th	74.0000%	10th	82.3456%	10th	91.2512%	10th	86.4833%

Year 4-6 Payment Information

The demonstration project was extended for an additional 3 years to test a different payment model using the composite scoring concept. In the first 3 years of the project only Top Performers (those in the top 20%) received payment. During the extension the payment expanded to include 3 payment opportunities for hospitals:

- 1) Attainment - Hospitals that attain or exceed median level composite quality score (CQS) performance will receive an incentive payment. The attainment median benchmark will be the median level CQS from Year 2 of the project. The composite quality score is adjusted to compare only measures that were effective in both years.
- 2) Top performer - Hospitals in the top performer group consisting of the top 20% of hospitals in each clinical area will receive an additional incentive payment. Note: This group will receive the median level attainment performance award as well.
- 3) Improvement award - Hospitals that attain median level performance and are among the top 20% of hospitals with the largest percentage quality improvements in each clinical area will receive an additional incentive payment. Again the composite quality score is adjusted to compare only measures that were effective in both years and only hospitals that meet the volume threshold of 30 cases per year in both timeframes are eligible for the award. Hospitals that change MPNs between years are not eligible for this award as the data may not be comparable between years due to mergers, hospital closings, etc.

Improvement is calculated based on the change in the hospital CQS in the performance year compared to two years prior. For Year 4, the improvement score will be calculated as Year 4 CQS value divided by Year 2 CQS value minus one:

$$\frac{\text{Year 4 Composite Quality Score}}{\text{Year 2 Composite Quality Score}} - 1$$

Note: This group will receive the median level attainment performance award as well.

Providers are eligible for only 2 awards per clinical area: attainment and top performer or attainment and improvement. If a hospital is a top performer in a clinical area then they are not eligible for the improvement award in the same clinical area.

When interpreting the data for the Year 2 threshold to Year 4, it is important to understand the PCI measure in the AMI population requirement change from administration within 120 minutes after arrival to within 90 minutes after arrival, and the application of this to the payment model. This change was made with 3rd quarter 2006 data, the last quarter in year three. Two of the three incentives, as well as the penalties, involve comparing a hospital's performance during Year 4 to their performance in Year 2 or to thresholds which were set based on Year 2 data when the measure was evaluated at 120 minutes. Therefore the Year 2 thresholds and hospital data were recalculated using a PCI within 90 minute measure to reconcile changes in the measure across time and make the Year 2 data more comparable to Year 4. The recalculation allows a better understanding of a hospital's true improvement in the AMI clinical area.

Decile Thresholds

Following are the decile thresholds for the final Year 4 data. A hospital must score above the value listed to be in the next decile. For example, a hospital must be above the value listed in the 2nd decile field in order to be in the 1st decile.

AMI		HF		PN		CABG		Hip / Knee	
1st		1st		1st		1st		1st	
2nd	99.2614%	2nd	98.1884%	2nd	96.7709%	2nd	99.7133%	2nd	99.1798%
3rd	98.5509%	3rd	96.4324%	3rd	95.6364%	3rd	99.4855%	3rd	98.8106%
4th	97.9964%	4th	94.4724%	4th	94.2387%	4th	99.1910%	4th	98.3767%
5th	97.6327%	5th	92.8437%	5th	93.6196%	5th	98.9901%	5th	97.8273%
6th	96.9950%	6th	91.5789%	6th	92.7111%	6th	98.7514%	6th	97.3640%
7th	96.0988%	7th	90.3226%	7th	91.6522%	7th	98.4148%	7th	96.6647%
8th	95.4240%	8th	88.6275%	8th	90.0971%	8th	98.0809%	8th	95.8503%
9th	94.3368%	9th	86.8845%	9th	88.5463%	9th	97.4995%	9th	94.6712%
10th	92.4447%	10th	84.1652%	10th	85.4864%	10th	96.4470%	10th	93.0385%

Providers must have a score above the threshold to be in that decile.

Example: AMI for Year 4

1st decile providers CQS is above 99.2614%

2nd decile providers CQS is above 98.5509%

The recalculated decile thresholds for Year 2 reflecting the PCI measure change are shown below.

AMI		HF		PN		CABG		Hip / Knee	
1st		1st		1st		1st		1st	
2nd	96.9609%	2nd	93.8063%	2nd	90.5395%	2nd	98.7850%	2nd	98.2031%
3rd	96.2695%	3rd	90.3581%	3rd	88.6792%	3rd	98.0934%	3rd	97.1267%
4th	94.9834%	4th	87.7551%	4th	86.4831%	4th	97.6542%	4th	96.2283%
5th	94.2285%	5th	85.3968%	5th	85.4028%	5th	96.3105%	5th	95.3262%
6th	93.1568%	6th	81.9178%	6th	83.5366%	6th	94.7883%	6th	93.9114%
7th	91.8134%	7th	78.7097%	7th	82.3773%	7th	93.1537%	7th	92.2317%
8th	91.0447%	8th	74.1117%	8th	80.8219%	8th	91.1406%	8th	90.5970%
9th	89.0710%	9th	70.1677%	9th	78.5714%	9th	86.7501%	9th	87.1353%
10th	85.5078%	10th	62.7326%	10th	75.8868%	10th	82.4677%	10th	82.3636%

Penalty Changes

During the first 3 years of the project penalties were only assessed during the final year. For the extension penalties are assessed each year based on thresholds set two years prior (i.e., Year 4 is based on the 9th and 10th decile thresholds set from Year 2). The composite quality score is adjusted to compare only measures that were effective in both years.

In addition, penalty thresholds have been capped at 85% for the extension period. Participants in HQID have continuously improved throughout the project, setting the bar higher and higher. For example, in the Coronary Artery Bypass Graft clinical area the 9th decile threshold for year 1 was 81.43%. The 9th decile threshold increased to 93.96% for year 3 and 97.5% by year 4. Based on the high level of performance in some clinical areas the decision was made to allow the penalty thresholds to adjust every year but set a maximum penalty threshold of 85% above which a penalty will not be assessed no matter where the 9th and 10th reference deciles fall.

The advantage of this option is that the penalty threshold to identify poor performance is capped and the threshold can be communicated to clients in advance (before the measurement period). In addition 85% is a natural baseline from the start of the demo as it represents the highest reference threshold in the first year of the demo (AMI 9th decile threshold). While capping the thresholds for clinical areas where performance is already high this option also allows the bar to be set higher for other clinical areas with more opportunity for improvement.

Year 2 Deciles with Penalty Threshold cap applied

AMI	
1st	
2nd	96.9609%
3rd	96.2695%
4th	94.9834%
5th	94.2285%
6th	93.1568%
7th	91.8134%
8th	91.0447%
9th	85.0000%
10th	85.0000%

HF	
1st	
2nd	93.8063%
3rd	90.3581%
4th	87.7551%
5th	85.3968%
6th	81.9178%
7th	78.7097%
8th	74.1117%
9th	70.1677%
10th	62.7326%

PN	
1st	
2nd	90.5395%
3rd	88.6792%
4th	86.4831%
5th	85.4028%
6th	83.5366%
7th	82.3773%
8th	80.8219%
9th	78.5714%
10th	75.8868%

CABG	
1st	
2nd	98.7850%
3rd	98.0934%
4th	97.6542%
5th	96.3105%
6th	94.7883%
7th	93.1537%
8th	91.1406%
9th	85.0000%
10th	82.4677%

Hip / Knee	
1st	
2nd	98.2031%
3rd	97.1267%
4th	96.2283%
5th	95.3262%
6th	93.9114%
7th	92.2317%
8th	90.5970%
9th	85.0000%
10th	82.3636%