

Background

The Tufts Health Plan Blue Ribbon designation is awarded to certain eligible primary care and primary care/specialist physicians based upon their medical group's high performance on selected quality and cost-efficiency measures. The quality and cost-efficiency measures were equally weighted and combined to create an overall score used to identify the physicians who were awarded the Tufts Health Plan Blue Ribbon designation.

Tufts Health Plan began this recognition program in 2005 with the input of our Physician Quality Measurement Advisory Panel.

The Blue Ribbon designation is a recognition program and does not affect member benefits or member responsibility for copayments/deductibles or coinsurance. Physicians need to be in good standing with Tufts Health Plan and state licensing boards to qualify for the Blue Ribbon status.

Data Sources

Quality measures and medical group definitions came from Massachusetts Health Quality Partners (MHQP). For additional information, visit their Web site at mhqp.org. Select the "Quality Reports" tab, then select "Clinical Quality." Choose "Technical Appendix" to learn more about their methodology, and "Medical Group Performance" to see how each medical group performed for each of the quality measures.

The cost-efficiency data were derived from Tufts Health Plan's medical and pharmacy claims dated January 2007 through June 2009, as processed through Episode Treatment Group™ (ETG) software.

Methodology

Eligible physicians: Primary care and primary care/specialist physicians who had at least 5 episodes attributed to him/her and whose medical group had at least 65 episodes in total for all physicians. In addition, physicians must be part of Tufts Health Plan's contracted provider network.

Scoring Method: A standardized score (Z-score) was calculated based on each medical group's performance distribution for each measure. An aggregated Z-score was used for the final ranking.

Z-scores throughout the performance rating methodology were calculated as:

$$Z\text{-score} = (x - X) / SD$$

where x = medical group rate

X = network average rate

SD = standard deviation among medical groups' rates.

Level of analysis: Cost-efficiency performance data were aggregated at the medical group level using data for the individual physicians in each medical group. Quality data were analyzed directly at the medical group level.

Quality

Thirty-two HEDIS® Quality Measures were utilized. These measures were based upon HEDIS 2009 reporting year 2008 data and are as follows:

- Annual Monitoring for Patients on Persistent Medications - ACE Inhibitors or ARBs
- Annual Monitoring for Patients on Persistent Medications - Anticonvulsants
- Annual Monitoring for Patients on Persistent Medications - Digoxin
- Annual Monitoring for Patients on Persistent Medications - Diuretics
- Annual Monitoring for Patients on Persistent Medications - Total Rate
- Antidepressant Medication Management - Effective Acute Phase Treatment
- Antidepressant Medication Management - Effective Continuation Phase Treatment
- Appropriate Testing for Children with Pharyngitis
- Appropriate Treatment for Children with Upper Respiratory Infection (URI)

- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
- Breast Cancer Screening
- Cervical Cancer Screening
- Chlamydia Screening in Women Ages 16 to 20
- Chlamydia Screening in Women Ages 21 to 24
- Cholesterol Management for Patients with Cardiovascular Conditions - LDL-C Screening
- Colorectal Cancer Screening
- Comprehensive Diabetes Care - Medical Attention for Nephropathy
- Comprehensive Diabetes Care - HbA1c Testing
- Comprehensive Diabetes Care - LDL-C Screening
- Comprehensive Diabetes Care - Retinal Eye Exams
- Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis
- Follow-up of Care of Children Prescribed ADHD Medications - Initiation Phase
- Persistence of Beta Blocker Treatment After a Heart Attack
- Pharmacotherapy of COPD Exacerbation - Dispensed a Bronchodilator
- Pharmacotherapy of COPD Exacerbation - Dispensed a Systemic Corticosteroid
- Use of Appropriate Medications for People with Asthma: Adults Ages 18 to 56
- Use of Appropriate Medications for People with Asthma: Children Ages 5 to 17
- Use of Imaging Studies for Low Back Pain
- Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- Well Care Visits for Adolescents Ages 12 to 21
- Well-Child Visits Ages 3 to 6
- Well-Child Visits First 15 Months of Life

Quality Score Calculation

- Z-score calculations were performed on each HEDIS indicator for each medical group.
- A weighted quality score for each medical group was created by multiplying the Z-score for each measure by the weights reflected in the table below. These weights originated from NCQA/U.S. News & World Report "America's Best Health Plans" ranking methodology.
- An average quality Z-score for each medical group was calculated by dividing the weighted quality Z-score by the sum of each of the weights shown below:

Measure	Weight
Annual Monitoring for Patients on Persistent Medications - ACE Inhibitors or ARBs	1/5
Annual Monitoring for Patients on Persistent Medications - Anticonvulsants	1/5
Annual Monitoring for Patients on Persistent Medications - Digoxin	1/5
Annual Monitoring for Patients on Persistent Medications - Diuretics	1/5
Annual Monitoring for Patients on Persistent Medications - Total rate	1/5
Antidepressant Medication Management - Effective Acute Phase Treatment	1/2
Antidepressant Medication Management - Effective Continuation Phase Treatment	1/2
Appropriate Testing for Children with Pharyngitis	1/2
Appropriate Treatment for Children with Upper Respiratory Infection (URI)	1/2
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	1
Breast Cancer Screening	1
Cervical Cancer Screening	1
Chlamydia Screening in Women Ages 16 to 20	1/2
Chlamydia Screening in Women Ages 21 to 24	1/2
Cholesterol Management for Patients with Cardiovascular Conditions - LDL-C Screening	1

Measure	Weight
Colorectal Cancer Screening	1
Comprehensive Diabetes Care - Medical Attention for Nephropathy	1/4
Comprehensive Diabetes Care - HbA1c Testing	1/4
Comprehensive Diabetes Care - LDL-C Screening	1/4
Comprehensive Diabetes Care - Retinal Eye Exams	1/4
Disease Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	1
Follow-up of Care of Children Prescribed ADHD Medications - Initiation Phase	1
Persistence of Beta Blocker Treatment After a Heart Attack	1
Pharmacotherapy of COPD Exacerbation - Dispensed a Bronchodilator	1/2
Pharmacotherapy of COPD Exacerbation - Dispensed a Systemic Corticosteroid	1/2
Use of Appropriate Medications for People with Asthma: Adults Ages 18 to 56	1/2
Use of Appropriate Medications for People with Asthma: Children Ages 5 to 17	1/2
Use of Imaging Studies for Low Back Pain	1
Use of Spirometry Testing in the Assessment and Diagnosis of COPD	1
Well Care Visits for Adolescents Ages 12 to 21	1
Well-Child Visits Ages 3 to 6	1
Well-Child Visits First 15 Months of Life	1

- Each medical group's average quality Z-score score was normalized within the appropriate specialty (i.e., Pediatric, Family Practice, Internal Medicine) to create the final quality Z-score.

Cost Efficiency

Data were grouped into ETGs using software from Ingenix. ETGs, similar in concept to DRGs, identify and classify the episodes of care into a limited number of categories. An episode of care starts with the first claim for a certain disease or condition and continues until treatment is completed, including inpatient, ambulatory, professional, pharmacy, and ancillary services. Each episode was then grouped with others into one of the 553 ETGs, which are clinically homogeneous with respect to the underlying cause of illness and hence treatment requirements.

For the Blue Ribbon analysis, only those episodes most specific to primary care practices were included. Episodes that were high or low outliers were dropped from the analysis, as were data from patients with severe illness burdens.

Data Specifications

- Medical and pharmacy claims data
 - Dates of service: January 1, 2007–June 30, 2009, 90-day lag
 - Products: HMO, POS, PPO
 - Cost data were standardized across products using PPO rates
- Data were grouped into episodes of care, using ETG grouper software from Ingenix. Completed episodes were selected for inclusion based on the following criteria:
 - The episode belonged to one of the primary care conditions (i.e., "Core" ETGs): 5, 6, 7, 22, 26, 32, 46, 47, 48, 76, 77, 98, 100, 107, 116, 145, 204, 278, 279, 280, 281, 287, 305, 309, 310, 311, 320, 322, 329, 331, 332, 333, 335, 337, 341, 354, 371, 372, 374, 378, 381, 382, 383, 384, 385, 388, 389, 392, 393, 396, 397, 409, 410, 431, 433, 435, 450, 474, 485, 486, 516, 533, 572, 574, 596, 671, 672, 673, 675, 676, 687, 690, 692, 720, 752, 780, 790, 791, 792, 793, 794, 800, 801, 811, 900, 901.
 - The episode was not an "outlier ETG." Outlier ETGs are rare and/or extremely high cost (e.g., liver transplants).

- Episodes for catastrophic patients (i.e., those with more than 30 episodes during the service period) were excluded.
- Within ETGs, high- and low-cost outlier episodes were excluded.
- Episodes were attributed to physicians and peer groups using software from ProfSoft Inc.
 - Each physician's medical group was identified through MHQP and is the same as those utilized for the quality component of the Blue Ribbon designation evaluation.
 - Medical group specialties were based on the PCP specialties (i.e., Pediatric, Family Practice, Internal Medicine); medical group scores for groups with more than one physician specialty were weighted using specialty norms.
 - Total episode cost was assigned to the primary care physician who ordered or performed at least 50 percent of the episode costs. If the episode was split among several physicians, with none responsible for 50 percent, the episode was not included in the score calculation. All the episode's costs were then attributed to this primary care physician, including costs for services ordered or performed by specialists.
 - Episodes were assigned to the individual physician, not the medical group. The case mix-adjusted cost-efficiency scores for each PCP specialty established the peer group norms.

Cost-Efficiency Score Calculation

- The cost-efficiency score for each medical group was derived by calculating the ratio of actual costs (i.e., payments to providers including any copayments and/or deductibles due from the member) to expected costs for all completed episodes attributed to physicians in each medical group.
- For single-specialty groups, the expected cost for each ETG was set by the peer group norms. Total expected cost equaled the expected cost per episode times the number of completed episodes for the medical group across all ETGs.
- For multi-specialty groups, the expected cost was calculated as follows:

$$\text{Expected cost} = \sum_{\text{ETG } 1-t} [(N_P * X_P) + (N_F * X_F) + (N_A * X_A)]$$
 Where N = number of episodes in that ETG by all doctors in that peer group
 P = pediatric MDs, F = family practice MDs, A = internal medicine MDs
 X = average cost per episode
 t = number of ETGs for that medical group
- Actual cost was calculated for all groups by summing total episode costs for all episodes attributed to physicians in the medical group.
- Medical groups with fewer than 65 episodes meeting the selection criteria did not receive a cost-efficiency score. Data for physicians with fewer than five episodes were not included in the medical group's data.
- The group scores represent cost-efficiency performance for the participating physicians during the reporting period.
- Medical group cost-efficiency scores were then normalized to Z-scores for combining with quality data.

Integrating Quality and Cost-Efficiency

The quality and cost-efficiency ratings (Z-scores) were added together to produce an equally weighted overall Z-score. Medical groups were selected for Blue Ribbon designation if they had the following:

- A combined Z-score in the top 25 percent of evaluated physicians
- Sufficient data to calculate their scores for HEDIS and cost-efficiency

Note: There are many ways to measure the quality of care provided by medical groups. The reported results do not guarantee the quality of care that a person might receive from a specific physician or medical group. In reviewing the Blue Ribbon information, readers should consider that the composition of medical groups may change throughout the year, and medical groups may be rated differently when other measures of quality or cost are used. The Blue Ribbon information is one aspect of the decision tools available, and a variety of factors should be used when selecting a health care provider.