Background

The California Office of the Patient Advocate (OPA) is charged with representing the interests of health plan members and OPA has the mandated responsibility to publicly report on health care quality. OPA published its first Health Care Quality Report Card in 2001 and has since successfully updated and enhanced the Report Card every year. The current version (2012 Edition) of the online Health Care Quality Report Card is at: www.opa.ca.gov.

Performance reports are reported for 212 physician organizations that participate in the Integrated Healthcare Association (IHA) Pay for Performance initiative (P4P) (see details on this initiative at: http://www.iha.org/pay_performance.html). IHA is a statewide multi-stakeholder leadership group that promotes quality improvement, accountability and affordability of health care. IHA collects quality data on the physician organizations that contract with commercial HMOs for P4P and provides the data to OPA for the Health Care Quality Report Card. The IHA physician organizations are referred to as medical groups in the Report Card and in the remainder of this document.

The 2012 Edition of the Report Card is published in February 2012, using data reported by medical groups in Reporting Year (RY) 2011 for performance in Measurement Year (MY) 2010. Data sources are the California Cooperative Healthcare Reporting Initiative’s (CCHRI) publicly reported HMO Health Plan Employer Data and Information Set (HEDIS) commercial measures and the medical group Patient Assessment Survey (PAS) data for RY 2011, also collected by CCHRI.

CCHRI is a nonprofit collaborative of health care purchasers, plans and providers that collects HEDIS and Consumer Assessment of Healthcare Providers and Systems (CAHPS) health plan quality data, as well as the medical group PAS data and provides these data to OPA. The National Committee for Quality Assurance (NCQA) develops and maintains the HEDIS performance measures as the national standard set of health plan clinical process and outcomes measures. The Agency for Healthcare Research and Quality (AHRQ) develops and maintains the CAHPS measures as the national standard set of health plan members’ experience. NCQA sponsors the CAHPS member-reported experience and satisfaction survey measures as the national standard health plan member experience survey. IHA developed and sponsors the PAS.

*The source for data contained in this publication is Quality Compass®2011 and is used with the permission of the National Committee for Quality Assurance (NCQA). Quality Compass 2011 includes certain CAHPS data. Any data display, analysis, interpretation, or conclusion based on these data is solely that of the authors, and NCQA specifically disclaims responsibility for any such display, analysis, interpretation, or conclusion. Quality Compass is a registered trademark of NCQA. CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).
Scoring Methodology

There are three levels of measurement:

1. **Summary Performance Indicator Scoring**
   
   The summary indicator “Patients Rate Medical Group” is scored by calculating the mean of the means for all of a medical group’s respondents’ scores for four composites: Communicating with Patients, Timely Care and Service, Helpful Office Staff and Coordinating Patient Care.

   a) A **mean score** is calculated for each respondent’s answers to all items across the 4 composites.

   b) A person-level mean is calculated for each respondent to account for missing values (as such, this is not an averaging of the 4 composite scores at the group-level). This person-level scoring takes advantage of the correlation in survey responses given by an individual respondent to handle missing values.

   c) A medical group summary indicator is scored by calculating the mean of the respondent means.

   d) The medical group mean score is adjusted per the case mix adjustment steps described below.

   e) The summary indicator mean score is not rounded or truncated – we produce scores with at least 2 decimal places to support the application of the buffer zone rule below.

2. **Composite Topic Scoring**

   Composite scores are calculated for five topics for each medical group (See Table 1 below for the PAS questions that are included in each composite topic):

   - Communicating with Patients
   - Timely Care and Service
   - Helpful Office Staff
   - Coordinating Patient Care
   - Health Promotion

   a) Scoring is done on a per respondent basis.

   b) A respondent is eligible if the respondent answered at least 50% of the items in the composite.

   c) Missing value: if an item is not answered a half-scale missing value rule is applied (see Appendix A).

   d) Item response values are assigned per Table 2 below.
e) A mean score is calculated for each respondent for each composite.

f) A medical group composite mean is scored by calculating the mean of the respondent means.

g) Each item in each composite is equally weighted.

h) The medical group composite score is adjusted per the case mix adjustment steps described below.

i) A composite is not scored if a group has fewer than 100 respondents for that composite.

Table 1. PAS RY 2011 Questions Used in Summary Performance Indicator and Composite Topics

<table>
<thead>
<tr>
<th>Composite</th>
<th>Composite Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating with Patients</td>
<td>Q9, Q10, Q11, Q13, Q14, Q15</td>
</tr>
<tr>
<td>Timely Care and Service</td>
<td>Q4, Q5, Q6, Q7, Q8</td>
</tr>
<tr>
<td>Helpful Office Staff</td>
<td>Q39, Q40</td>
</tr>
<tr>
<td>Coordinating Patient Care</td>
<td>Q18, Q20</td>
</tr>
<tr>
<td>Health Promotion (not included in Summary Performance Indicator)</td>
<td>Q16, Q17</td>
</tr>
</tbody>
</table>


3. Stand alone Measure Reporting

The two-item “Health Promotion” composite is reported as a stand alone measure. It is not included in the Summary Performance Indicator score. The two-items that comprise the composite are:

Q. 16 Did you and this doctor talk about a healthy diet and healthy eating habits?
Q. 17 Did you and this doctor talk about the exercise or physical activity you get?

The Health Promotion questions and composite are constructed by combining results across two years as the single year patient sample size is too small to yield reliable results. The two years of data are combined using a 55/45 weighting scheme – 55% percent current year and 45% previous year.
Table 2. Response Choice Values

<table>
<thead>
<tr>
<th>Item Response Set</th>
<th>Response Choice Value Mean Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never-always</td>
<td>Always = 100</td>
</tr>
<tr>
<td></td>
<td>Almost always = 80</td>
</tr>
<tr>
<td></td>
<td>Usually = 60</td>
</tr>
<tr>
<td></td>
<td>Sometimes = 40</td>
</tr>
<tr>
<td></td>
<td>Almost never = 20</td>
</tr>
<tr>
<td></td>
<td>Never = 0</td>
</tr>
<tr>
<td>Definitely (4 part response)</td>
<td>Definitely yes = 100</td>
</tr>
<tr>
<td></td>
<td>Somewhat yes = 66.6</td>
</tr>
<tr>
<td></td>
<td>Somewhat = 33.3</td>
</tr>
<tr>
<td></td>
<td>Definitely no = 0</td>
</tr>
<tr>
<td>Definitely (3 part response)</td>
<td>Yes, definitely = 100</td>
</tr>
<tr>
<td></td>
<td>Yes, somewhat = 50</td>
</tr>
<tr>
<td></td>
<td>No, definitely not = 0</td>
</tr>
<tr>
<td>0-10 global</td>
<td>Item scored as a continuous variable: 0=0; 1 =10; 2=20; 3=30; 4=40; 5=50; 6= 60; 7=70; 8=80; 9=90; 10=100</td>
</tr>
</tbody>
</table>

4. **Case Mix Adjustment**

The “raw” scores are adjusted to account for differences across medical groups in their patient populations and the types of providers being rated. The case mix model includes: age, gender, education, co-morbidities, mental health status, general health status (SF-1- Question 1 of the Short Form Health Survey), obesity indicator (derived from patient Body Mass Index - BMI), patient’s race/ethnicity and primary language spoken at home, physician specialty, mode of survey (i.e., mail, phone, web), and language the survey was completed in.
5. Grading
The grade cutpoints listed in Table 3 are applied to assign a medical group’s grade for the summary indicator “Patients Rate Medical Group.”

Table 3. Patients Rate Medical Group

<table>
<thead>
<tr>
<th>Grade</th>
<th>Cutpoints</th>
<th>Star Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>85-100</td>
<td>4 stars</td>
</tr>
<tr>
<td>Good</td>
<td>80-84</td>
<td>3 stars</td>
</tr>
<tr>
<td>Fair</td>
<td>73-79</td>
<td>2 stars</td>
</tr>
<tr>
<td>Poor</td>
<td>&lt;73</td>
<td>1 star</td>
</tr>
</tbody>
</table>

Buffer Zone

We apply a buffer zone of a half-point (0.5) span below each of the 3 performance cutpoints. Any medical group whose score is in the buffer zone that is 0.5 point below the grade cutpoint is assigned the next highest category grade. For example, a score of 79.5 would be assigned a grade of ‘good’ given the good/fair cutpoint of 80, whereas a score of 72.4 would be assigned a grade of ‘poor’ given the fair/poor cutpoint of 73 and in this example the score is more than 0.5 below the grade cutpoint.

A composite result is not publicly reported if the group-specific reliability for the composite is less than 0.70. A minimum survey response rate is not a criterion for public reporting.

6. Exclusion of Non-Composite/Other Questions

The following four items, which are not included in any of the 5 composites listed above, are not used in the California Health Care Quality Report Card consumer reporting:

Q. 22  What number would you use to rate this doctor?
Q. 23  Would you recommend this doctor to your family and friends?
Q. 42  When you tried to make an appointment to see a specialist how often did you get an appointment when you needed it?
Q. 43  What number would you use to rate all of your health care from all your doctors and other providers?

‘Too few patients in sample to report’ indicates the medical group did not have enough patients who had the experience to be scored for a particular measure.

‘No report due to incomplete data’ indicates that the medical group did not report measure results for that particular year.

A 0% result indicates that the medical group did not report the measure results for two consecutive years.
The PAS analysis and scale construction uses mean scoring. The final results reflect composite scales constructed using a half-scale rule. At least half of the questions included in a composite had to have a valid response category value after data cleaning to calculate a composite score. If fewer than 50% of the questions in a composite were answered, a composite score is not calculated for that respondent and is represented as missing in the analytic data set.

The following steps describe the application of the half-scale rule to create composite measures. Individual measures are scored following Steps 1-2 below, in terms that convert the 3, 5, and 6 point response choices to a zero to 100 scale.

1) Convert the original item score to 0-100 score using the following formula:

\[ \text{Item Score} = 100 \times \frac{(\text{original item score} - \text{minimum possible item score})}{(\text{maximum possible item score} - \text{minimum possible item score})} \]

Where the original item score is the item response chosen by the survey respondent and the minimum and maximum possible item scores are the smallest and largest values, respectively, that are possible response options.

2) Reverse all the items that are in negative direction (i.e., the lower, the better) to positive direction (i.e., the higher, the better) by taking:

\[ \text{Item score} = 100 - \text{item score} \]

This step will result in all the items in one scale to be in one positive direction.

3) Count the number of items completed for each individual within each scale and denote this by “nitems”.

4) Calculate the average of items scores by adding up all the item scores completed and then divide by the result of step 3 “nitems”, this denotes the “scale_score”.

5) Determine one half (½) of the total items within the scale. The ½ of the items within the scale is the smallest integer that equals or exceeds one half of the total items in that scale. For example, if a composite scale has 6 items, ½ of the items is 3. If the composite scale has 7 items, ½ of the scale is 4.

6) Determine whether “nitems” is at least ½ of the total items within that scale. If “nitems” is greater or equal to (≥) one half of the items in the scale, the resulting scale score for that individual is the result from step 4 “scale_score”. If “nitems” is less than (<) one half of items in the scale, the “scale_score” is reset to missing for that individual.