An Analysis of Appropriateness of Care Models for Maryland's HSCRC Qualitative Initiative

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Appropriateness of Care Models –Patient-focused Quality Measures

- For each patient determine what care should be provided.
- Hospital patient is judged to have appropriate care, if he/she receives all aspects of care identified as needed.
- Hospital's score for each condition is the proportion of patients within the condition receiving appropriate care.

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Appropriateness of Care Models Strengths

- Patient-centered perspective on quality
- Less chance of “small n” issue
- Less problem from topped out measures
- Treats all patients equally
- If weighting is desired, there would be a clear method for weighting condition-specific scores to get overall composite score.

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Appropriateness of Care Models Weaknesses

- Hard to get the data–currently need to go through a QIO
- Hospital receives same score whether patient misses one service or several.
- Hospital score does not immediately indicate where the quality issues lie.
- Fewer measures can be combined to create a hospital level composite (4 conditions instead of 19 individual measures)
- By design Appropriateness of Care Scores will be lower. This may possibly mislead potential patients about the quality of the hospitals in this state.

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Appropriateness of Care Models - Calculations based on 2007 QIO data

- Examined appropriateness of care models (ACM) for four conditions – AMI, PN, HF, SCIP
- Examined models with and without the new measures for PCI (AMI 8a) and SCIP-VTE.
- Because these services were performed so infrequently, there was virtually no difference between models including them and not including them.
- Results presented are for the case where the three additional measures are included.

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Appropriateness of Care Models - Results from the 2007 QIO data

- Pages 1-5 gives Hospital ACM scores for AMI, PN, HF, SCIP, and then overall (treating each patient as equal).
- Regarding “small n” issue, hospitals need at least 10 patients with the condition in order to report on it.
  - Only three conditions at two hospitals could not be scored because of this ’10 or more’ criteria.
- Results indicate that Maryland hospital have greatly improved their performance on process measures
  - 2007 ACM scores now have ranges that were achieved by the individual measures only a few years ago.

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Appropriateness of Care Models - Composite Score Approaches

- Pages 6-9 gives various approaches to combining the four condition-specific ACM scores to derive a overall composite.
- Two approaches are based on the previous VBP methodology, wherein meritorious performance (i.e., that which is at or above the 50th percentile) is awarded a certain number of points.
  - "VBP Attain" approach uses only 2007 data and bases the award strictly on attainment.
  - VBP Full" approach makes use of both 2006 and 2007 data and gives the higher of attainment or improvement points.
- Two other approaches are based on the new "Relative Quality Index" (RQI). wherein hospitals can receive low points for poor performance exactly like they receive high points for meritorious performance.
  - Again, RQI can be implement as attainment only ("RQI attain") or with both attainment and improvement ("RQI Full").

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Appropriateness of Care Models - Results on Composite Scores

- Results on pages 6-9 and the four graphs that accompany provide the distributions for the four alternative approaches.
- These results indicate that any one of the four approaches could be used:
  - "VBP Attain" approach is skewed left (low values) and is not normally distributed. However, it clearly has the most room to grow if ACM scores continue to improve.
  - "VBP Full" (attainment and improvement) and "RQI Attainment" have very similar distributions and both are close to normal.
  - "RQI Full" is skewed to the right. This is probably not a good choice because it will only move further right in the coming years.

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