MAP Rural Health Technical Expert Panel: Addressing the Low Case-Volume Challenge

CSAC Informational Update

April 23-24, 2019
Overview of Presentation

- Background on MAP Rural Health Work
- MAP Rural Health Technical Expert Panel (TEP)
  - Members, Objectives, Activities
- TEP Recommendations
- Next Steps
- Discussion
Background: MAP Rural Health Workgroup

Key Activities for 2017-2018

- Assemble MAP Rural Health Workgroup
- Identify a core set of the best available rural-relevant measures
- Identify gaps in measurement and provide recommendations on alignment and coordination of measurement efforts
- Make recommendations regarding measuring and improving access to care for the rural population
Background: MAP Rural Health Workgroup

Key Activities for 2018-2019

▪ Share with, and invite feedback from, the MAP Hospital, Clinician, and PAC/LTC Workgroups on the August 2018 report and recommendations

▪ Provide feedback on clinician-specific measures included on the 2018 Measures Under Consideration (MUC) list

▪ Convene a Technical Expert Panel (TEP) to provide feedback and recommendations to address the low case-volume (LCV) challenge faced by many rural providers
TEP Members

- Mariel Finucane, PhD
  - Senior Statistician, Mathematica Policy Research, Inc.

- Jeffrey Geppert, EdM, JD
  - Senior Research Leader, Battelle Memorial Institute

- Shuangge (Steven) Ma, PhD
  - Professor of Biostatistics, Yale University

- Jessica Schumacher, PhD
  - Director of Data Management and Analytics for the Surgical Collaborative of Wisconsin, University of Wisconsin - Madison, Surgical Collaborative of Wisconsin

- Alan Zaslavsky, PhD
  - Professor, Harvard Medical School
TEP Objectives

- Develop recommendations on approaches for calculating healthcare performance measures when case-volume is low
  - Consider exemptions for reporting requirements in various CMS programs
  - Consider heterogeneity of residents and providers in rural areas
  - Recommendations should include approaches that are actionable for measure developers

- Assist NQF in drafting a report that describes the TEP’s discussion and recommendations
TEP Activities
(September 2018 – March 2019)

- Participate in four 3-hour conference calls
- Consider previously recommended solutions to the LCV challenge
- Provide recommendations on how to address the LCV challenge faced by rural healthcare providers
- Assist in drafting a report summarizing their recommendations
- Assist in reviewing/responding to public comments, finalizing recommendations, and revising draft report
TEP Recommendations on Addressing the Low Case-volume Issue

- Borrow strength to the extent possible
- Recognize the need for robust statistical expertise and computational power
- Report exceedance probabilities
- Recognize potential for downstream unintended consequences

NQF released the final report on March 29, as well as a press release on April 2
Borrow Strength to the Extent Possible

- No Pooling (adequate data)
- Partial Pooling (borrowing strength)
- Complete pooling
Recognize the Need for Robust Statistical Expertise and Computational Power

- Requires the professional expertise of PhD-level statisticians
  - Develop the statistical models for borrowing strength
  - Write the programming code to implement measures that use this approach

- Requires robust computational resources
  - Computers with sufficient power to store, manage, and compute statistical models for very large datasets
Report Exceedance Probabilities

- Underlying recommendation: Reflect the uncertainty of measure results
  - Alternative to confidence intervals
  - Example: We can be 84 percent sure that hospital A is performing above the mean on this particular measure

- Particularly useful if the goal of measurement is to help consumers (or others) maximize their chances of choosing a provider that would be most likely to provide a good outcome

- Still uncommon, so need education and field testing to ensure that healthcare consumers know how to interpret performance results
Recognize Potential for Downstream Unintended Consequences

- Using a measure in an incentive program without realizing that it does not work well for rural providers
  - Potential for misappropriation of incentive payments
  - Potential to encourage activities that are counter-productive in rural environments

- Using measurement results to drive large-scale policy decisions that affect rural residents and providers, but without proper consideration of potential downstream effects

- Vigilance required, as is a willingness to change course if needed
  - Formal feedback loops should be established to facilitate this vigilance
Some Additional Recommendations

**Research**
- Simulation studies
- Challenge grants
- Explore which structural characteristics might be appropriate in defining shrinkage targets for performance measurement of rural providers
- Pull together experts from other disciplines who also face the LCV problem

**Policy**
- Explore the implications of lack of service delivery
- Revisit/refine the core set of rural measures identified by the MAP Rural Health Workgroup
Next Steps

- Expect continued funding for MAP Rural Health Workgroup
  - *Scope of work not yet defined*
Discussion Questions

- One of the TEP members said early on, regarding LCV, “there is no magic bullet.”
  - Does this surprise you?
  - What is your general reaction to the recommendation to “borrow strength”?  

- Have you ever heard of, seen, or used exceedance probabilities?
  - What do you think of the recommendation?

- What is your reaction to this TEP’s recommendation regarding the potential for unintended consequences?
  - Can you think of others besides those verbalized by the TEP?