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Scientific Methods Panel Web Meeting

July 29, 2021

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Welcome

NQF Scientific Methods Panel Team

- Tricia Elliott, MBA, CPHQ, FNAHQ, Interim Sr. Managing Director
- Sharon Hibay, DNP, BS, RN, Senior Consultant
- Jill Boylston Herndon, PhD, Consultant
- Elisa Munthali, MPH, Consultant
- Mike DiVecchia, MBA, PMP, Senior Project Manager
- Hannah Ingber, MPH, Senior Analyst
- Gabby Kyle-Lion, MPH, Coordinator



NQF Scientific Methods Panel Members

Panel Members	
David Nerenz, PhD, Co-chair	Paul Kurlansky, MD
Christie Teigland, PhD, Co-Chair	Zhenqiu Lin, PhD
J. Matt Austin, PhD	Jack Needleman, PhD
Bijan Borah, MSc, PhD	Eugene Nuccio, PhD
John Bott, MBA, MSSW	Sean O'Brien, PhD
Daniel Deutscher, PT, PhD	Jennifer Perloff, PhD
Lacy Fabian, PhD	Patrick Romano, MD, MPH
Marybeth Farquhar, PhD, MSN, RN	Sam Simon, PhD
Jeffrey Geppert, EdM, JD	Alex Sox-Harris, PhD, MS
Laurent Glance, MD	Ronald Walters, MD, MBA, MHA, MS
Joseph Hyder, MD	Terri Warholak, PhD, RPh, CPHQ, FAPhA
Sherrie Kaplan, PhD, MPH	Eric Weinhandl, PhD, MS
Joseph Kunisch, PhD, RN-BC, CPHQ	Susan White, PhD, RHIA, CHDA

Meeting Objectives

- To consider a policy change that requires validity testing at the accountable entity (formerly known as measure score) level for all maintenance measures
- To review forthcoming updates to the measure evaluation guidance
- To improve and clarify guidance on reliability testing for future measure development and evaluation cycles

Meeting Agenda

- Review of May meeting
- Accountable entity level validity testing for maintenance measures
- Updates to the measure evaluation guidance
- Minimum thresholds for reliability testing
- Opportunity for public comment
- Next steps

Review of May Meeting

Review of May SMP Advisory Meeting

- Reliability Thresholds
- Overarching Themes
 - ▣ Maintenance evaluation accountable entity/measure score reliability testing policy
 - ▣ Voting on individual measures with multiple components and performance rates
- Risk Adjustment Project

Accountable Entity Level Validity Testing for Maintenance Measures

Maintenance Accountable Entity/Measure Score Validity Testing Policy

- SMP members requested to discuss:
 - ▣ Require accountable entity/performance score-level validity testing for all maintenance measures
 - ▣ Require empirical validity testing for all maintenance measures
 - ▣ Ratings for maintenance measures to be based on accountable entity level and empirical validity testing

Measure Evaluation Guidance Updates

Measure Evaluation Guidance Updates

- Additional measure types/categories defined
 - ▣ PRO, PROM, PRO-PM
- Updated language
 - ▣ Data element level → patient/encounter level
 - » “Data element” will still be used when referring to how the measure is constructed (e.g. in eCQMs)
 - ▣ Measure score → accountable entity level
- Additional guidance on composite testing

Minimum Thresholds for Reliability Testing

Reliability Objectives

- To provide a concrete reliability guidance on minimum acceptable levels of testing, methods, performance and volume thresholds, sampling, level of analysis, and other considerations
- Adjudicate and accept concepts for the Reliability Proposed Sample Table, including testing types, levels, purpose, and thresholds (i.e., unacceptable, adequate, and high), as needed
- To provide guidance on the reliability testing guiding principles:
 - ▣ Each reliability test should have its own rule-of-thumb guideline
 - ▣ Patient-/encounter-level and accountable entity-level analyses also may require different standards and thresholds.



Reliability Table

- Discussion questions
 - ▣ Should the table only define adequate thresholds? (i.e. should the table collapse adequate and high thresholds?)
 - ▣ How will the SMP consider low volume testing and sampling situations?

Person-/Encounter-Level Reliability Testing (i.e., data element testing)

Approach (Test)	Purpose	Range	Threshold
Internal consistency (e.g., Cronbach's Alpha)	The internally consistency of items in a multi-item scale.	0 to 1	0.7
Inter-rater agreement e.g., (Cohen's Kappa)	The inter-rater agreement of qualitative items correcting for chance.	-1 to +1	0.4
Test-Retest Reliability (Intraclass coefficient [ICC] or Pearson correlation)	Extent to which two measurements of the same concept at different times agree.	-1 to +1	0.5
Linear Relationships (e.g., Pearson correlation coefficient)	Agreement between two measures of the same concept.	-1 to +1	0.6

Accountable Reporting Entity Level Reliability Testing (i.e., performance measure score testing)

Approach (Test)	Testing Purpose	Range	Threshold
Signal to Noise Ratio (SNR) or Inter-Unit Reliability (IUR)	The precision attributed to an actual construct versus random variation.	-1 to +1	0.5
Split-half reliability (Intraclass coefficient, with correction for full sample with Spearman-Brown formula)	Agreement between two measures of the same concept derived from split samples drawn from the same entity at a single point in time.	0 to 1	0.5

Opportunity for Public Comment

Next Steps

Timeline for Proposed Changes

- Should changes be enacted, NQF staff would engage the measurement community and query stakeholders' potential needs.
 - ▣ Present table to Consensus Standards Approval Committee (CSAC) in September
 - ▣ Engaging the measure community and other external stakeholders for input on these policy changes via public comment, webinars, advisory groups in September
 - ▣ Seek CSAC approval in October
 - ▣ Identify technical assistance and support opportunities for developers
 - ▣ Determine effective date for changes

Next Steps

- Meeting summary review by the SMP members; will be posted on NQF website
- Important upcoming dates:
 - ▣ SMP preliminary analysis of fall 2021 measures starts August 23
 - ▣ Measure evaluation meeting will be held on October 26, 27
 - ▣ SMP member nominations will take place for the spring 2022 cycle

THANK YOU.

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