



NATIONAL  
QUALITY FORUM

# Scientific Methods Panel August Call Meeting

Andrew Lyzenga, MPP

Ashlie Wilbon, MS, MPH, FNP-C

Karen Johnson, MS

Poonam Bal, MHSA

May Nacion, MPH

*August 9, 2018*

# Welcome, Roll Call, and Review of Meeting Objectives

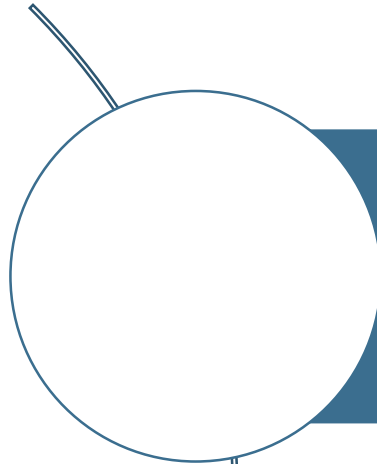
# Scientific Methods Panel Members

- David Cella, PhD, (Co-Chair)
- David Nerenz, PhD (Co-Chair)
- J. Matt Austin, PhD
- Bijan Borah, MSc, PhD
- John Bott, MBA, MSSW
- Lacy Fabian, PhD
- Marybeth Farquhar, PhD, MSN, RN
- Jeffrey Geppert, EdM, JD
- Paul Gerrard, BS, MD
- Laurent Glance, MD
- Stephen Horner, RN, BSN, MBA
- Sherrie Kaplan, PhD, MPH

# Scientific Methods Panel Members (continued)

- Joseph Kunisch, PhD, RN-BC, CPHQ
- Paul Kurlansky, MD
- Zhenqiu Lin, PhD
- Karen Joynt Maddox, MD, MPH
- Jack Needleman, PhD
- David Nerenz, PhD
- Eugene Nuccio, PhD
- Jennifer Perloff, PhD
- Sam Simon, PhD
- Michael Stoto, PhD
- Christie Teigland, PhD
- Ronald Walters, MD, MBA, MHA, MS
- Susan White, PhD, RHIA, CHDA

# Meeting Objectives



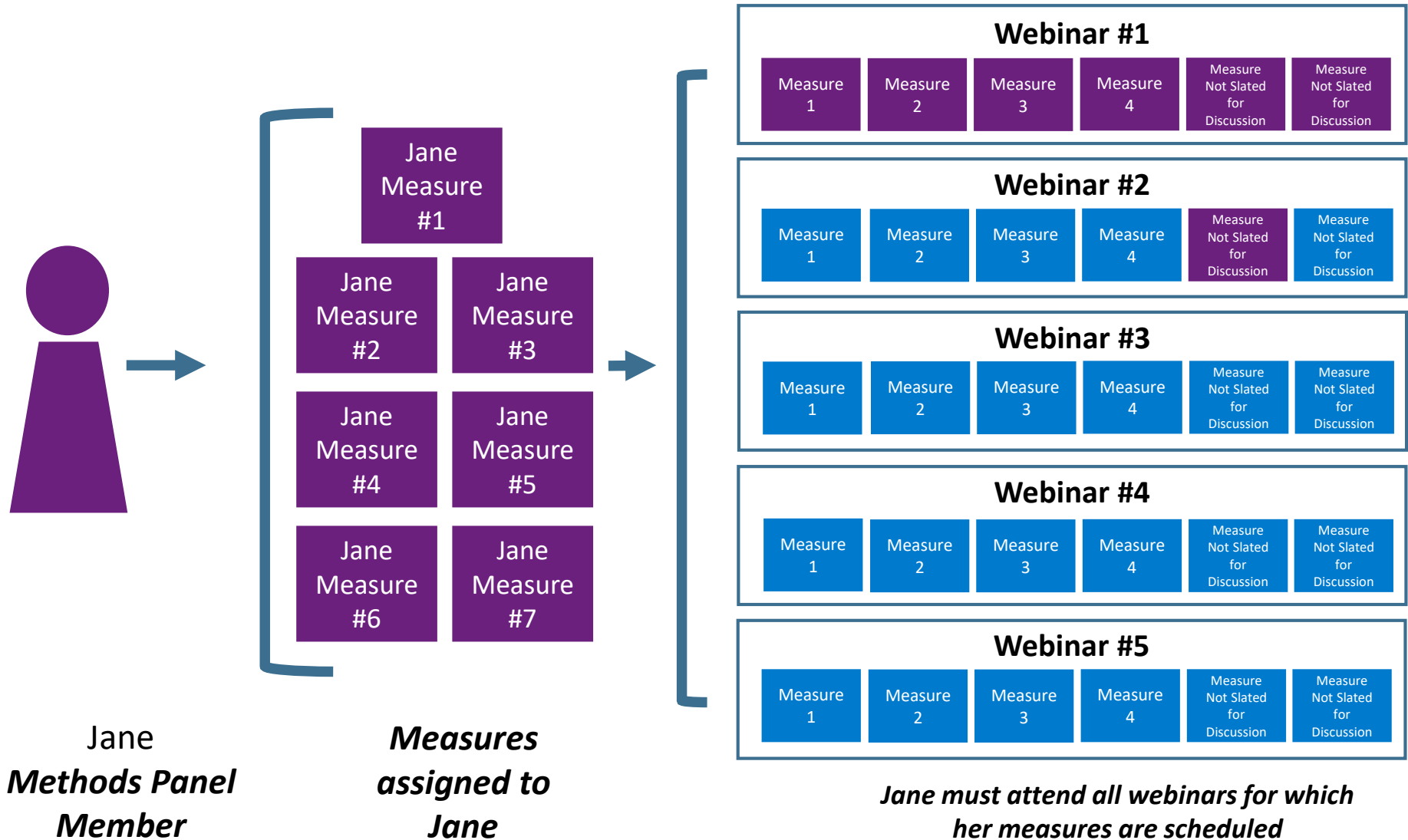
Process Updates



Methodologic Issues Discussion:  
Signal-to-Noise Methodologies

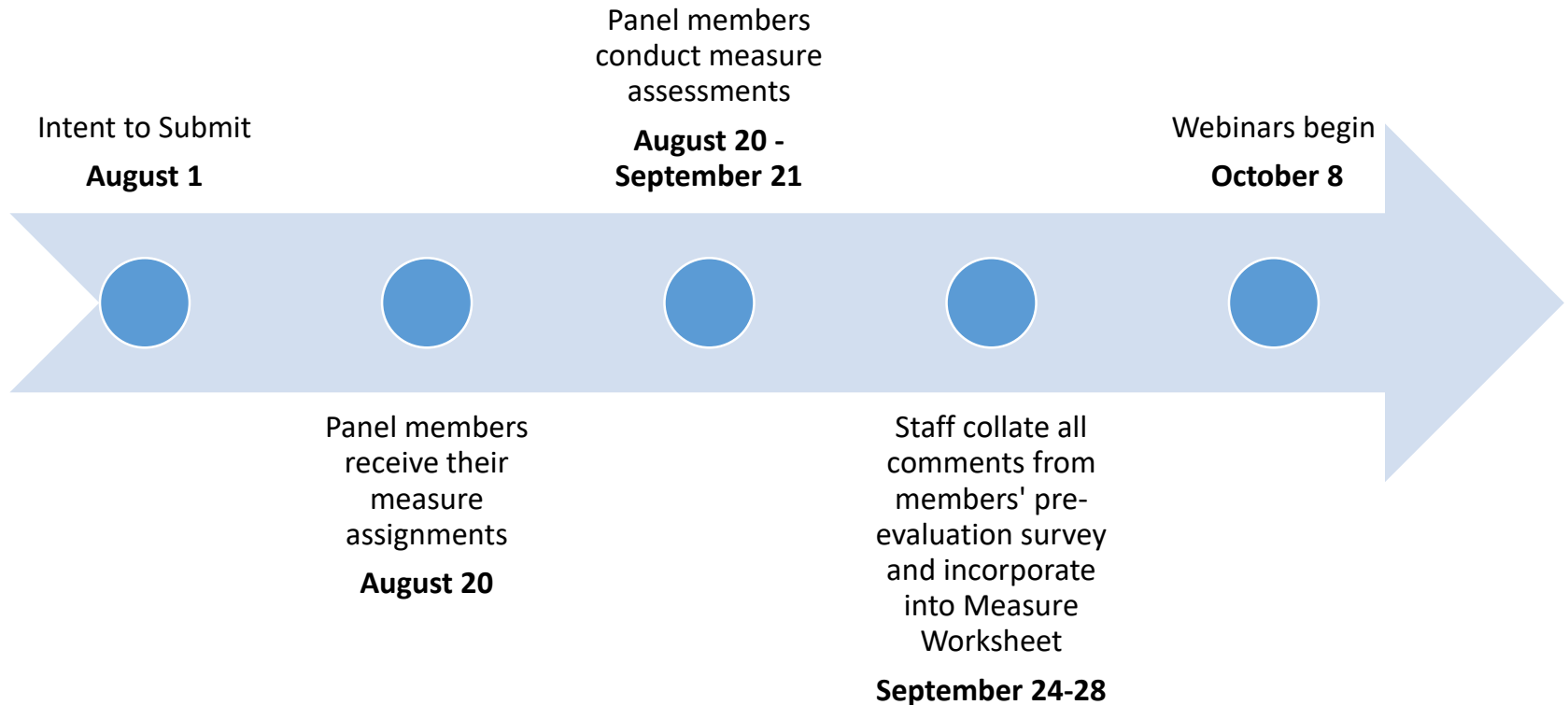
# Process Updates

# Subgroup Process – Fall 2018 Illustrative Example



# Proposed Fall 2018 Review Timeline

\*Dates Subject to Change





# Revised Preliminary Analysis (PA) Form

- **Objectives of the Fall 2018 PA Form:**

- *Encourage narrative assessments and an opportunity to provide positive and/or negative feedback*
- *Enable more holistic measure assessments*
- *Enhance the form's usability*

- **Changes which Address Objectives:**

- *Elimination of the skip logic*
- *Addition of more open-ended questions*
- *Addition of measure evaluation criteria guidance*

- **Homework Assignment:** Review the revised PA form and provide feedback no later than **COB Tuesday, August 14**

# Methodologic Issue: Signal-to-Noise Methodologies

# Potential Signal-to-Noise Methodologies

- Hierarchical modeling
  - *Mixed models, various link functions*
- Adams' beta-binomial method
  - *For binomial (pass/fail) outcomes; "betabin" macro for SAS*
- Intra-class correlation coefficient (ICC)
  - *Various "flavors"*
  - *Spearman-Brown prophecy formula sometimes used*
- Inter-Unit Reliability (based on ANOVA F-statistic)
- Factorial ANOVA (generalizability theory)
- Confidence interval estimation
- Monte Carlo simulation to test Bayesian measure

# Questions to Consider

- Are any of these NOT S-to-N methods?
- Are there others?
- Can we start putting more information around these?
  - *Any that are particularly preferred?*
  - *What types of measures are these applicable to?*
  - *Any pros/cons?*
  - *How do you interpret the outcome?*
  - *References for “how to”?*
  - *Reference that show use?*
  - *Examples of analysis (including desired descriptions/results)*
  - *Ranges of acceptable values/rules of thumb*

# Member and Public Comment

# Next Steps

- Monthly 1-hour calls
  - *Every 2nd Thursday of the month*
  - *Next call: September 13, 3pm ET*
- Contact information: [methodspanel@qualityforum.org](mailto:methodspanel@qualityforum.org)

# Adjourn