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Best Practices for Developing and Testing Risk Adjustment Models

Web Meeting #5

July 30, 2021

This project is funded by the Centers for Medicare & Medicaid Services under contract HHSM-500-2017-00060I –75FCMC20F0001 - Best Practices for Developing and Testing Risk Adjustment Models.

Welcome

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Welcome

- The Webex platform will allow you to visually follow the presentation.
- Please mute your lines when you are not speaking to minimize background noise.
- You may submit questions to project staff via the Webex platform chat function.

If you are experiencing technical issues, please contact the NQF project team at RAGuidance@qualityforum.org

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Agenda

- Welcome, Roll Call and Meeting Objectives
- Web Meeting #4 Recap
- Review & Discuss Public Comments on the Technical Guidance Report
- Finalize Technical Guidance Report
- NQF Member and Public Comment
- Next Steps

Roll Call and Meeting Objectives

Project Team

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Technical Expert Panel (TEP) Members

Co-Chairs	Philip Alberti, PhD
	Karen Joynt Maddox, MD, MPH

Arlene Ash, PhD	John Martin, PhD, MPH
Patrick Campbell, PhD, PharmD, RPH	Shalini Prakash, MS
Elizabeth Drye, MD, SM	Sandra Richardson, MS
Marc Elliott, PhD, MA	David Shahian, MD
Rachel Harrington, PhD	Cristie Upshaw Travis, MSHHA
Bellinda King-Kallimanis, PhD, MSc	Janice Tufte
Vincent Liu, MD, MS	Katherine Vickery, MD, MSc.
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Federal Liaisons

Federal Liaison	Affiliation
Andy Frankos-Rey, MA	CMCS/CMS
Craig Caplin, PhD	HRSA
David Nyweide, PhD	CMMI/CMS
Jesse Roach, MD	CCSQ/CMS
Joel Andress, PhD	CCSQ/CMS
Lok Wong Samson, PhD	ASPE
Maushami (Mia) DeSoto, PhD	AHRQ
Rachael Zuckerman, PhD	ASPE
Sarah Gaillot, PhD	CM/CMS
Shafa Al-Showk, PhD	CM/CMS

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Meeting Objectives

- Discuss and adjudicate public comments on Technical Guidance (TG)
- Finalize the TG:
  - Finalize good and emerging best practices for social and/or functional status-related risk adjustment within quality measurement
  - Finalize recommendations and considerations for the Standard Risk Adjustment Framework

Web Meeting #4 Recap

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TEP Recommendations on TG

- Overarching recommendations:
  - Minimum standards should not be too prescriptive
  - Provide illustrative examples of aspects of the guidance within an appendix

- Conceptualizing the model
  - Increase emphasis of the conceptual model
  - Add subsections:
    - » Variable selection for examination
    - » Level of measurement
    - » Intended use

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TEP Recommendations on TG (cont'd.)

- Identifying and Selecting Potential Data Sources and Variables
  - Note the potential challenges of identifying certain risk factors due to data availability
  - Use phrases that include "such as" when listing data sources
  - Developers should provide an explanation of any bias that occurred and/or how to mitigate bias
  - Use "real" variable that is characterized at a level higher than the individual patient level (e.g., ZIP Code or county), instead of using proxy variables
  - Developers should describe the populations covered by the data source and explicitly state any limitations of the data source; disclosing whether any data cleaning was performed

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TEP Recommendations on TG (cont'd.)

- Empirically Testing Risk Factors
  - For risk factors that are identified in the conceptual model but not included in the final model, the developer should provide evidence that its removal does not cause significant prediction inaccuracy for that group or subgroup
  - Although not deterministic, developers should examine the empirical evidence in conjunction with the conceptual model; describe the statistical methods used and the results and interpretation of the analyses; be transparent about their approach and their interpretation of the results

Review & Discuss Public Comments on Technical Guidance

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Key Themes from Public Comments

- During the public comment period from June 17 – July 19, 2021, NQF received 11 comments from six stakeholders.
- Key themes identified
  - NQF's approach to addressing health equity
  - Alignment of NQF's recommendations with Office of the Assistant Secretary for Planning and Evaluation's (ASPE)
  - Additional clarification on risk stratification
  - Guidance vs. being overly prescriptive
  - Empirical testing requirements
  - Intended use
  - Locus of control
  - Widespread support and gratitude the TEP's work

Finalizing Technical Guidance

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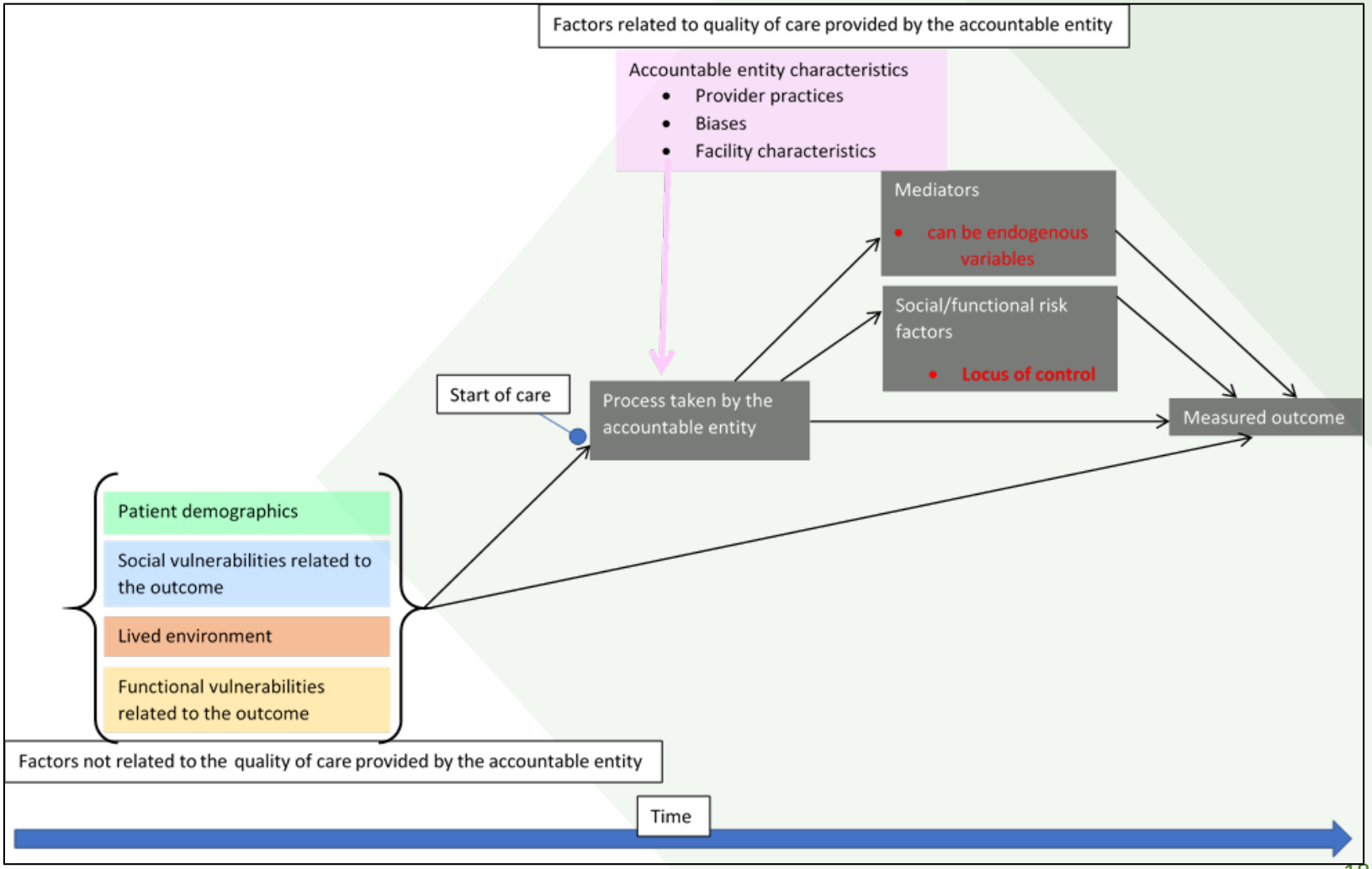
Figure 1. Conceptual Model



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Questions for the TEP based on Key Themes Identified from TEP Comments

- **Minimum Standard**: If social and/or functional status risk factors are not available but are included in the conceptual model, the developer should describe the potential bias that may exist and the direction and likely magnitude of that bias as a result of not including the risk factor(s) in the model. The developer should also provide a justification for why the measure still has validity even in this circumstance.

- *What should developers provide that describes the potential bias that may exist?*

- *How should developers assess a potential proxy variable for inclusion as a risk factor in a model?*

Questions for the TEP based on Key Themes Identified from TEP Comments

- **Minimum Standard:** Calibration should be conducted within the overall population and within relevant clinical or SES/SDS subpopulations. All risk models should be tested and vetted to examine whether they significantly under- or overpredict for important subgroups with social or functional risk. If a risk factor is not included in the model, the developer should, at a minimum, provide evidence that its removal does not inaccurate predictions for that group or subgroup.

- *What should developers do if the model is not calibrated at different subgroups?*

NQF Member and Public Comment

Next Steps

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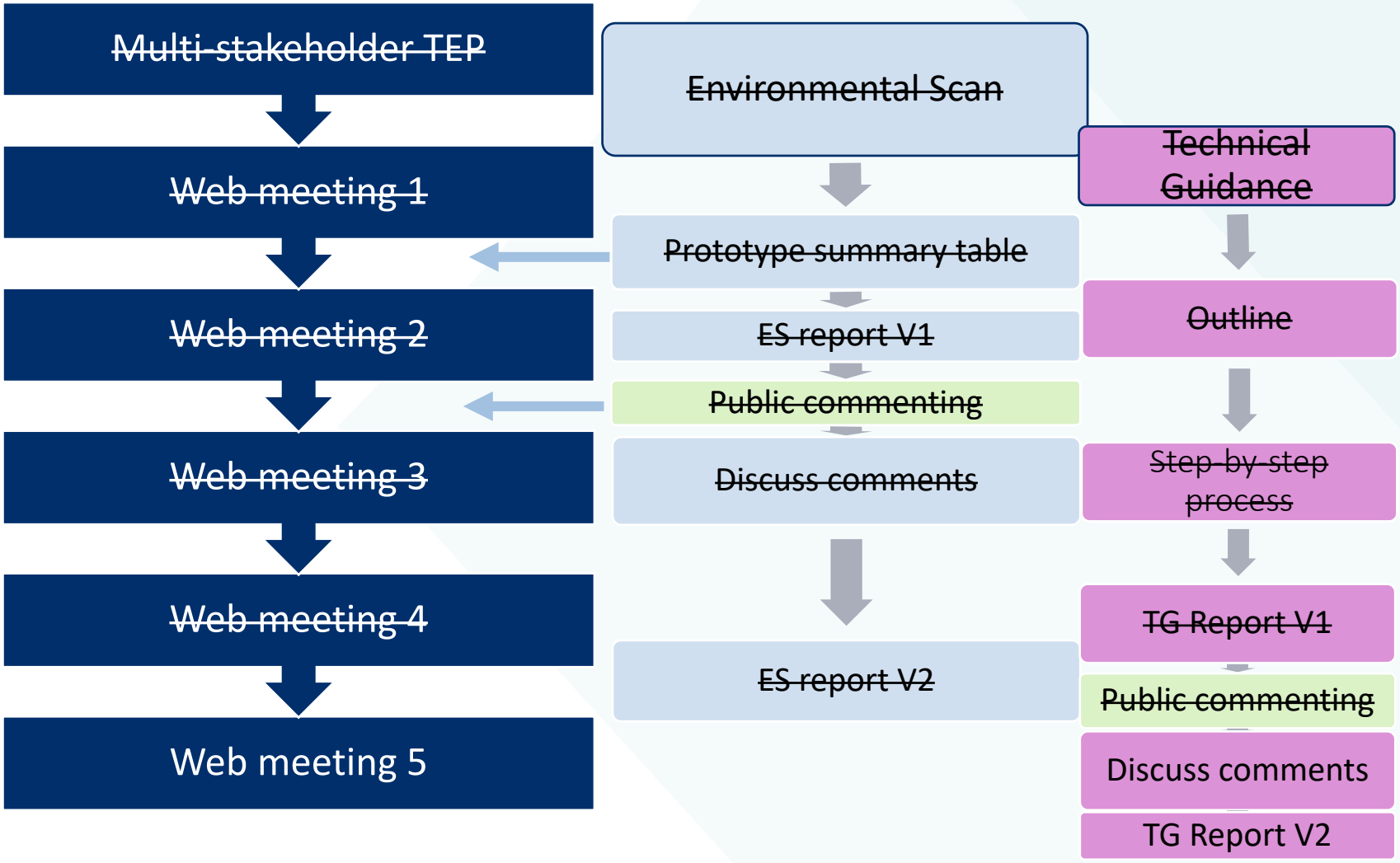
Key Milestones *(Base Year)*



Next Steps

- TEP feedback on proposed responses by August 2
- Final Technical Guidance will be posted on September 13, 2021.
- Option Year (if awarded)
  - Re-convene TEP web meetings
  - Conduct Key Informant Interviews (KIIs)
  - Update the Technical Guidance based on findings from KIIs

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- Project page:
  - http://www.qualityforum.org/Risk_Adjustment_Guidance.aspx
- SharePoint site:
  - https://share.qualityforum.org/portfolio/DevelopingandTestingRisk/SitePages/Home.aspx

THANK YOU.

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