

# CONSENSUS METHODS

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A banner for the Colorado Pragmatic Research in Health 2020 National Conference. The background is a blue-tinted aerial view of a city with mountains in the distance. The text is overlaid in white. The main title is 'Colorado Pragmatic Research in Health' in a large, sans-serif font. Below it is '2020 NATIONAL CONFERENCE' in a smaller, all-caps sans-serif font. At the bottom is the tagline 'Planning for Real World Impact' in a white, italicized serif font.

Colorado  
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ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES  
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# Overview

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- Definition
- General characteristics of Consensus Methods
- Overview of the 3 main methods

# Consensus Methods: Definition

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- A systematic, structured process to elicit and distill knowledge from a group of experts to develop consensus on a topic in which there is little evidence yet action is needed
- Obtain and systematically use insights from experts
- Allows experts to systematically deal with a complex problem, policy or task

# What Consensus Methods are NOT

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- Qualitative research
- Just talking with people

# Consensus Methods: When to Use

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- When the “problem” at hand:
  - Doesn't lend itself to specific qualitative or quantitative methods
  - Could benefit from collective expert opinion
  - Has no history or adequate information on its present and future development
  - Requires the exploration and assessment of multiple issues connected with various policy possibilities

# Consensus Methods: When to Use

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- Situations where it might be suitable
  - Identify priorities that could lead to future research
  - Need answers quicker than the traditional research process
  - Need to forecast future events
  
- Useful for:
  - Ensuring that all major possible options have been considered
  - Estimating the impact and consequences of an option
  - Examining the acceptability of a option

# Characteristics of all Consensus Methods

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- Engage experts
- Multiple rounds
- Need to pre-define what “consensus” will mean
- Number of people can range from 5-30
- Need to be very clear of your ask and goal

# Determining what is “Consensus”

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- Range from majority (51%) to >75%
- Sometimes you will do rank order and then select the top ‘x’ items
- Consider how heterogeneous your group is
- Consider the types of questions you are asking



# Selecting Experts

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- Predefine what types of experts you want to engage
- Need to be able to describe how you identified the list of experts (Can't be a list of your friends)
- If homogeneous group, can get good results with 10-15 individuals
  - Will need to be larger if experts are more heterogeneous

## 3 Types of Consensus Methods

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- Delphi Method
- Nominal Group Technique
- Consensus Development Panels or Conferences

# Delphi Method

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- Developed in the 1950s at RAND Corporation
- Originally developed for the use of forecasting the effects of new technologies on society and the economy

# Delphi Method: What is involved/Characteristics

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- Engage experts asynchronously
  - Can be geographically dispersed and can participate at time convenient to them
- Multiple rounds to achieve consensus
  - Structured questionnaires with options for open dialog/discussion
- Experts responses (at least initially) are anonymous
  - Minimize fears of potential repercussions
  - No one has to commit publically to a particular view until all of the alternatives have been put on the table
  - All voices are equally heard

# Delphi Method: The Process

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- Questions sent to experts are designed to:
  - Elicit individual responses to the problem
  - Enable the experts to refine their views as the group's work progresses
- First questionnaire – states the problem and asks for answers and comments (Exploration phase)
- Second questionnaire – developed based on the responses to the first questionnaire (Evaluation phase)
  - Assesses and summarizes the experts' views
  - Common to have experts rank items to establish preliminary priorities
- There are multiple rounds until consensus is achieved
  - Often experts will lose interest after 2-3 rounds

# Delphi Method Benefits and Limitations

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- Benefits
  - Anonymous
  - Can be done asynchronously across time
  - Not pressure to decide or reach consensus immediately
- Limitations
  - Need to have a idea about how many rounds it will require
  - Need to consider IRB requirements
  - Do not benefit from group interaction
  - Time intensive
  - Loss of experts over time

# Nominal Group Technique

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- Conducted in-person using multiple rounds
- Occurs during the course of one day/meeting
- Experts develop and suggest ideas and solutions in a group
- Ideas are initially proposed anonymously

# Nominal Group Technique: The Process

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- **1<sup>st</sup> Phase – Silent generation**
  - Experts independently generate ideas and solutions in response to a specific question
- **2<sup>nd</sup> Phase – Round robin**
  - Ideas are collected by the moderator
  - Moderator presents the ideas to the group
  - Experts listen to all ideas but do not discuss
- **3<sup>rd</sup> Phase - Clarification**
  - Moderator leads a discussion of the ideas
- **4<sup>th</sup> Phase – Voting/ranking**
  - Experts anonymously vote for or rank each idea



# Nominal Group Technique: Benefits and Limitations

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- Benefits

- Can complete in one day – efficient
- Includes anonymous option for response

- Limitations

- Expensive and difficult to get experts all in the same room
- There is group discussion which could bias the process

# Consensus Development Panels or Conferences

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- Organized meeting of experts that convene together for an in-person meeting or conference on a particular topic
- Includes multi-disciplinary experts
- Frequently used by NIH
- Often used to develop consensus statements
- (Much more vague in the process than other methods)

# Consensus Development Panels or Conferences: Process

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- Moderator presents the evidence for a particular topic
- There is organized discussion
- Can be less structured than the other methods

# Consensus Development Panels: Benefits and Limitations

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- Benefits

- Can complete in one day – efficient
- Begins with and therefore is rooted in the evidence

- Limitations

- Expensive and difficult to get experts all in the same room
- There is group discussion which could bias the process
- Not anonymous

# Platforms for Conducting Virtual Consensus Methods

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- REDCap or other online survey (Delphi)
- Zoom or other video conference that allows for anonymous voting (NGT and Consensus Conference)
- Specific software available
  - <https://www.edelphi.org/>
  - <https://www.welphi.com/Home.html>
  - <https://upboard.io/delphi-method-online-tools-web-templates/>
  - <http://Mesydel.com>

## Example: Delphi Method

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- Aim: To identify disability status questions to be used by healthcare organizations to collect demographic information
- Recruited 17 experts
  - Disability researchers: measurement, health/healthcare disparities
  - Researchers in documentation of race/ethnicity and LGBT status by healthcare organizations
  - Disability Advocates
  - Healthcare Providers

# Delphi Process

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- Two rounds of an online survey (REDCap)
- Timing
  - Participants had one week to complete the first round
    - Note: The participant was asked to select a time to take the survey. Sent the REDCap survey and told the participant they had 24 hours to complete.
  - Took 3 weeks to summarize and analyze
  - Participants had another week to complete second round
  - Took another 3 weeks to analyze
  - Sent the final results and they were given the chance to provide any additional comments

# First Round Delphi

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- Presented 31 disability questions from literature
- Experts rated using a Likert Scale disability questions on ability to provide information:
  1. Inform care planning
  2. Inform a medical history
  3. Identify patients who would benefit from healthcare accommodations
  4. Identify patients who experience disparities in health care
- Open response comments



<b>Part 1: How well do the following questions provide information for the identified categories?</b>												
	1= Not well, 2 = somewhat well, 3 = Well											
	Medical History			Care Planning			Identify accommodations			Track quality of care		
<b>Do you have any difficulty preparing your own meals?</b>	1	2	3	1	2	3	1	2	3	1	2	3
<b>Do you have difficulty saying, using, or understanding words or sentences? (5 years old or older)</b>	1	2	3	1	2	3	1	2	3	1	2	3
<b>Do you have difficulty walking without using any special equipment?</b>	1	2	3	1	2	3	1	2	3	1	2	3

<b>Part 2: This is your opportunity to comment on any of the questions. Please either select “No comment” or add a comment in the text box.</b>		
	No comment	Comment
<b>1. Do you have any difficulty preparing your own meals?</b>		
<b>1. Do you have difficulty saying, using, or understanding words or sentences? (5 years old or older)</b>		
<b>1. Do you have difficulty walking without using any special equipment?</b>		

# First Round Analysis

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- Grouped the 31 questions into 9 categories based on disability types
  - Cognition, mental health, mobility, fine motor, ADL, vision, hearing, communication and learning
- Eliminated question in each category that rated lowest on accommodation and track quality of care
- Descriptive summaries of comments and ratings

# Second Round Delphi

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- Presented first round results
  - General summary
  - Specific summary of each category of disability
    - Example: All of the hearing questions were grouped together with a summary of the findings of the hearing questions
- Gave opportunity for open response
- Out of 22 questions (plus any additional questions added by the experts), rank order the top 10 questions based on importance for inclusion

## Example Questions from the Second Round Delphi Survey

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1. Are you deaf or do you have difficulty hearing, even when using a hearing aid?\*\*\*
2. Are you deaf or do you have serious difficulty hearing?\*

Summary: The debate is whether to include the phrase “even when using a hearing aid”. The argument for including the phrase is to make it consistent with the vision question. The argument against including the phrase is to make it consistent with the ACS question. There are also concerns that the phrase could add confusion. Both questions were described as straightforward and easy to understand.

Suggested question from panel participant:

“Are you deaf or are you hard of hearing?”

*\* Question rated highly by the group as identifying patients who benefit from accommodations*

*\*\* Question rated highly by the group as identifying populations that potentially experience disparities in quality of care at the healthcare organization level*

*\*\*\* Questions rated highly for both accommodations and quality of care categories*



# Second Round Results

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- 10 questions were identified by at least 66% of the experts
  - 6 questions mandatory questions
  - 4 additional highly recommended questions
  
- Undecided on wording for 4 of the questions
  - Communication, learning, social disability and overall screening question

# Questions?

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