Delphi consensus study

- Red flags for remote cognitive diagnostic assessment: A Delphi expert consensus study by the Canadian Consortium on Neurodegeneration in Aging
- Cervical Disc Replacement in Athletes: A Modified Delphi Consensus Survey of Expert Opinion
- Basilar Invagination Diagnosis, Classification, and Radiology: WFNS Spine Committee Recommendations
- Will adaptive deep brain stimulation for Parkinson's disease become a real option soon? A Delphi consensus study
- Perioperative Management of Patients on Chronic Aspirin Therapy for Elective Brain Surgery: A Delphi Study
- Frailty and Survival for Diagnoses Feasibly Managed Operatively or Nonoperatively
- BOOTStrap-SCI: Beyond One option of treatment for spinal trauma and spinal cord injury: Consensus-based stratified protocols for pre-hospital care and emergency room (part I)
- Development of health promotion model in patient with severe traumatic brain injuries: A mixed-method study protocol

A **Delphi consensus study** is a systematic and iterative method used to gather and refine expert opinions to achieve a consensus on a specific topic, particularly in areas where evidence is limited or uncertain. It is commonly employed in healthcare, social sciences, and policy-making to develop guidelines, recommendations, or predictions.

Key Features of a Delphi Consensus Study:

1. **Expert Panel**:
    1. A group of subject matter experts is selected based on their expertise and experience in the topic under investigation.

2. **Iterative Rounds**:
    1. The study involves multiple rounds of questionnaires or surveys. After each round, the responses are aggregated and anonymized, and the summary is shared with the participants to refine their opinions in subsequent rounds.

3. **Anonymity**:
    1. Participants' identities are usually kept confidential to minimize bias, groupthink, or dominance by more influential members.

4. **Controlled Feedback**:
    1. Experts receive a summary of the group's responses (e.g., statistical analysis or qualitative synthesis) after each round, helping them re-evaluate their opinions based on the collective input.

5. **Structured Communication**:
    1. The process is highly organized, with clear questions or statements, often rated on a Likert scale (e.g., levels of agreement or importance).

6. **Consensus Building**:

    1. The goal is to identify areas of agreement and disagreement among experts, ultimately leading to a consensus on specific issues or recommendations.

7. **Final Outcome**:

    1. The final round typically produces a set of agreed-upon statements, guidelines, or recommendations, often presented with a consensus threshold (e.g., ≥75% agreement).

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Applications in Healthcare: - **Guideline Development**: E.g., clinical practice recommendations when evidence from randomized trials is insufficient. - **Policy Formulation**: Informing policies or protocols in resource-limited or uncertain situations. - **Research Prioritization**: Identifying key areas for future research.

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Strengths: - Involves multiple expert opinions, improving credibility. - Mitigates biases like dominance of vocal participants. - Flexible and can be applied in various fields.

Limitations: - Relies on expert judgment, which can still be subjective. - Time-consuming due to multiple rounds. - Quality depends on the selection of experts and the clarity of survey design.

Example: In the study you provided, the **Delphi consensus** method was used by the European Association of Neurosurgical Societies (EANS) to develop recommendations for the diagnosis and management of non-specific spinal infections, involving rounds of input from 26 neurosurgical experts.