

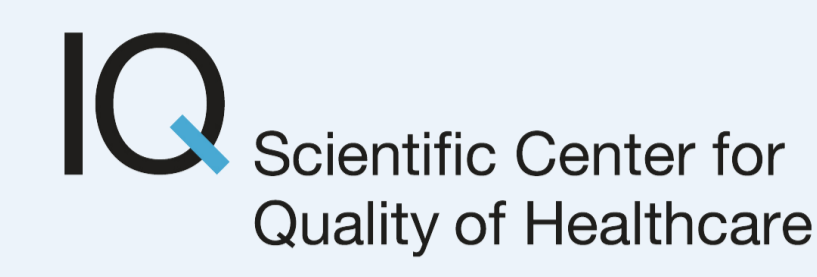
International priorities in patient safety research: A Delphi study

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Background & objective

- Patient safety represents a serious public health problem that affects all countries worldwide: one in 10 patients is harmed while receiving hospital care, and adverse events result in 23 million disability-adjusted life years lost per year (Jha et al., 2013).
- Research is essential for tackling the alarming situation in patient safety.
- According to WHO recommendations, all countries should identify, analyze and prioritize areas where patient safety research could provide significant benefits to the national healthcare system (WHO, 2021). However, only a few articles address research prioritization.
- **This study aimed to address the gap in knowledge about the current perceptions of experts in patient safety regarding the most important research areas in this topic. We aimed to find consensus in current patient safety research priorities at international level.**

Methods

- A **Delphi technique** was used to build consensus on research priorities for patient safety.
- Participants included:
 - Individuals with scientific expertise in patient safety and authors of publications of the field
 - Healthcare professionals, academics, policy makers, patient representatives and researchers experienced in patient safety
 - Other recommended experts on patient safety research
- A total of **84 experts from all around the world** were invited to participate in the study.
- **Two online rounds** were conducted over a period of three months.

Round 1

- Experts were presented with 18 research areas of patient safety (based on WHO publications).
- For each area, they were asked to rate (from 1 to 7) its **level of importance** and the degree in which they thought it was **feasible to implement changes** in the next few years in that area.
- They had the option to suggest other areas and ideas.



- Mean, standard deviation (SD) and median scores were calculated to identify areas to be eliminated and areas to remain in the second round.
- Some labels were modified, and research areas were added, merged or split based on participants' suggestions.

Round 2

- For each research area that was maintained from round 1, experts were presented with the mean and SD scores for the overall group.
- Seven new areas were included based on inputs from round 1.
- **Experts were asked to score each area again:** the perceived importance and the feasibility to implement of each area.



- Consensus was defined as an interquartile range (IQR) of ≤ 2 .

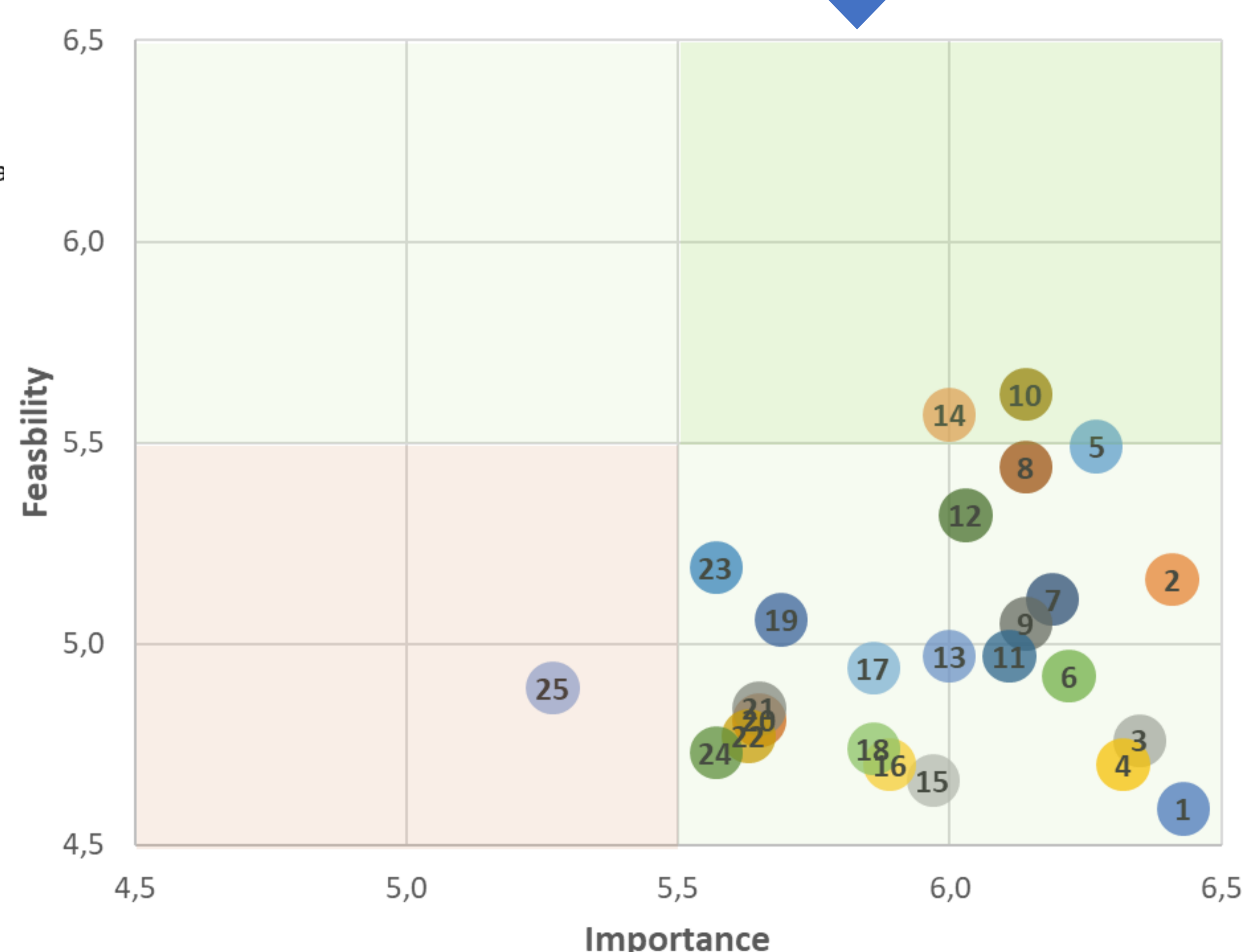
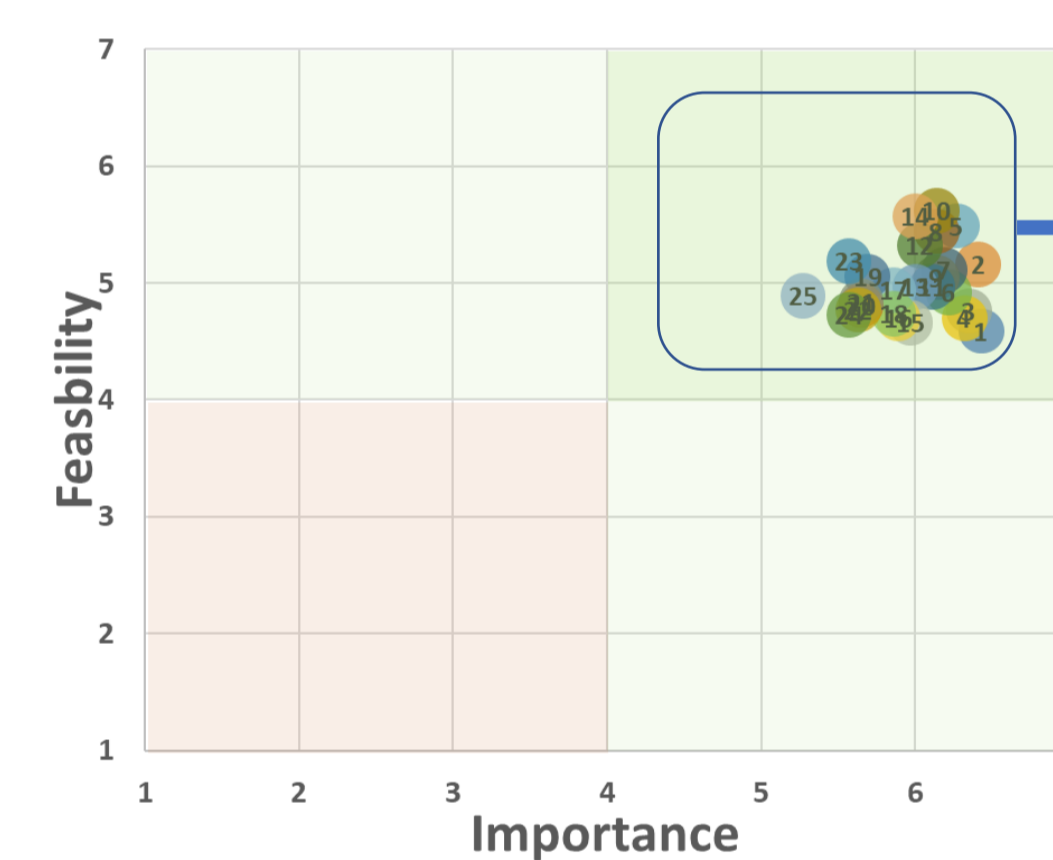
Results

- A total of 44 experts completed the 1st round, and 37 completed the 2nd round of the survey.
- **Participants' characteristics:**
 - Participants from **16 different countries** participated.
 - The most common background (54.5%) was **medicine**, followed by **epidemiology/public health** (36.4%).
 - Most participants were **academics** (40.9%), **health care providers** (34.1%) and/or **researchers** (31.8%).
 - Mean age was 52,97 (SD = 9.01; range = 38-69).
 - Mean number of years working in the healthcare sector = 27,79 (SD = 9.56; range = 10-42).

- **Research areas perceived as most important:**

Research area	Round 1		Round 2	
	M (SD)	Md (IQR)	M (SD)	Md (IQR)
Safety culture in health care organizations	6.27 (1.11)	7 (1)	6.43 (0.84)	7 (1)
Identification, design and testing of locally effective and affordable solutions for improvement of patient safety	6.40 (0.98)	7 (1)	6.41 (0.83)	7 (1)
Identification and control of latent conditions or contributing factors	6.34 (0.83)	7 (1)	6.35 (0.63)	6 (1)

- **Importance and feasibility of all the research areas:**



Conclusions

- **Patient safety culture in health care organizations was the highest ranked priority area of patient safety research**, followed by Identification, design and testing of locally effective and affordable solutions for improvement of patient safety.
- **Patient safety in medication** was perceived as the area in which it was most feasible to implement changes.
- The highest ranked research priorities do not correspond with the areas in which experts perceive that it is more feasible to implement changes within the next years.
- The **areas perceived as most important and feasible to change at the same time** were: Patient safety in medication; Knowledge, competence, skills, and training needs in patient safety among health care staff; and Health care-associated infections.
- This should be considered by policymakers, research commissioners and researchers. Patients will ultimately benefit from research in these areas.

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