

BCCS AI Workshop 2025: Concept Mapping Analysis Report

August 11, 2025 Dataset Analysis

Report Generated: August 11, 2025

Dataset Summary:

- Total Statements Analyzed: 100
 - Total Participants: 13
 - Total Ratings Collected: 2395
- Analysis Date: August 11, 2025

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1. Overview

This report presents the comprehensive concept mapping analysis conducted for the BCCS AI Workshop held on August 11, 2025. The analysis involved 100 AI-related statements that were evaluated by 15 participants across two key dimensions: **importance** and **feasibility**. The concept mapping methodology combines qualitative grouping of statements with quantitative rating scales to identify patterns, priorities, and strategic insights. Participants first grouped similar statements together, then rated each statement on a 1-5 scale for both importance and feasibility. The analysis reveals four distinct clusters of statements, each representing different strategic priorities and implementation considerations for AI integration in cancer care. The visualizations provide insights into the relationships between importance and feasibility, helping to identify immediate action items, strategic planning priorities, and areas requiring further consideration.

2. Key Findings

Most Important Statements:

- **Statement 1:** 1. Human oversight during implementation in early days (Importance: 4.25)
- **Statement 89:** 89. Allow clinicians to focus on tasks requiring their expertise (Importance: 4.17)
- **Statement 3:** 3. Concerns with patient acceptability (Importance: 4.08)
- **Statement 8:** 8. Minimizing bias and increasing performance and accuracy (Importance: 4.00)
- **Statement 9:** 9. Ensuring accountability and oversight of AI (Importance: 4.00)

Most Feasible Statements:

- **Statement 50:** increases digestability/highlighting key points (Feasibility: 4.33)
- **Statement 57:** 57. 24/7 availability, AI doesn't get tired or brain fog (Feasibility: 4.25)
- **Statement 37:** 37. Consultation recording and transcription (Feasibility: 4.18)
- **Statement 4:** 4. Efficiency improved for documentation (Feasibility: 4.17)
- **Statement 51:** 51. Collate large databases (Feasibility: 4.17)

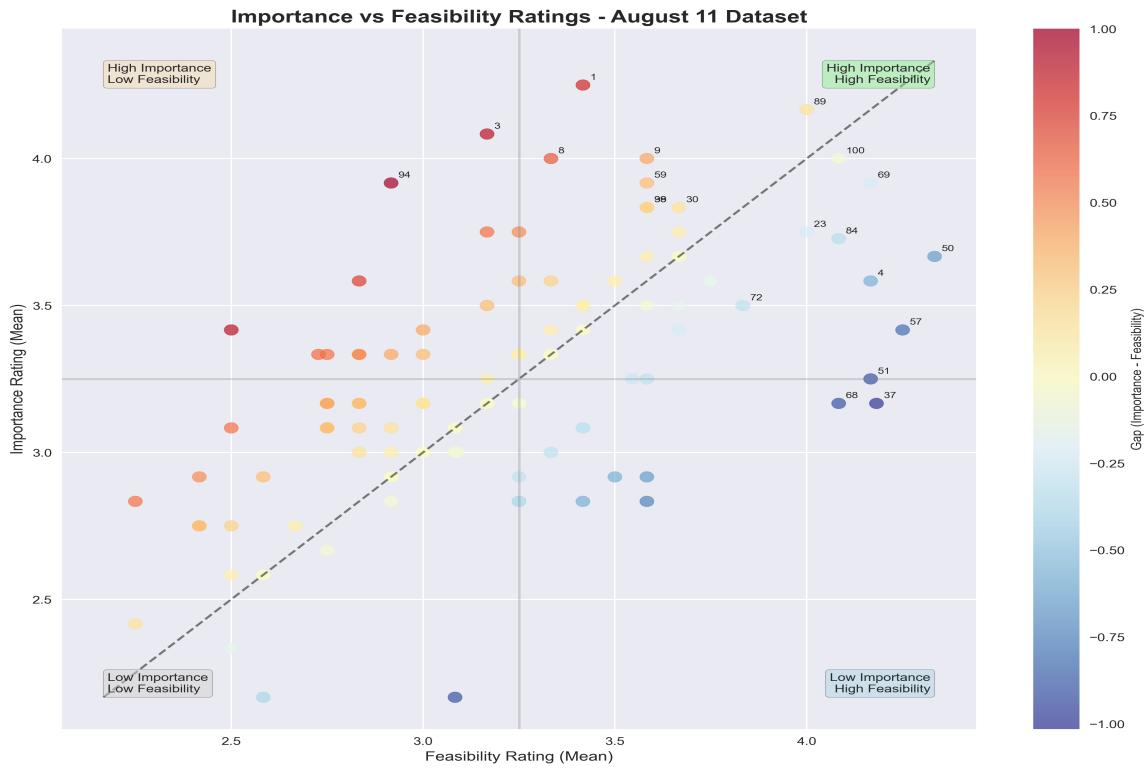
Cluster Analysis Summary:

The analysis identified four distinct clusters of statements:

- **Cluster 0** (23 statements): High importance (3.73) and medium feasibility (3.42) - Strategic priorities requiring planning
- **Cluster 1** (15 statements): Low importance (2.64) and low feasibility (2.53) - Monitor and evaluate
- **Cluster 2** (45 statements): Medium importance (3.14) and medium feasibility (3.07) - Balanced considerations
- **Cluster 3** (17 statements): High importance (3.59) and high feasibility (4.00) - Immediate action items

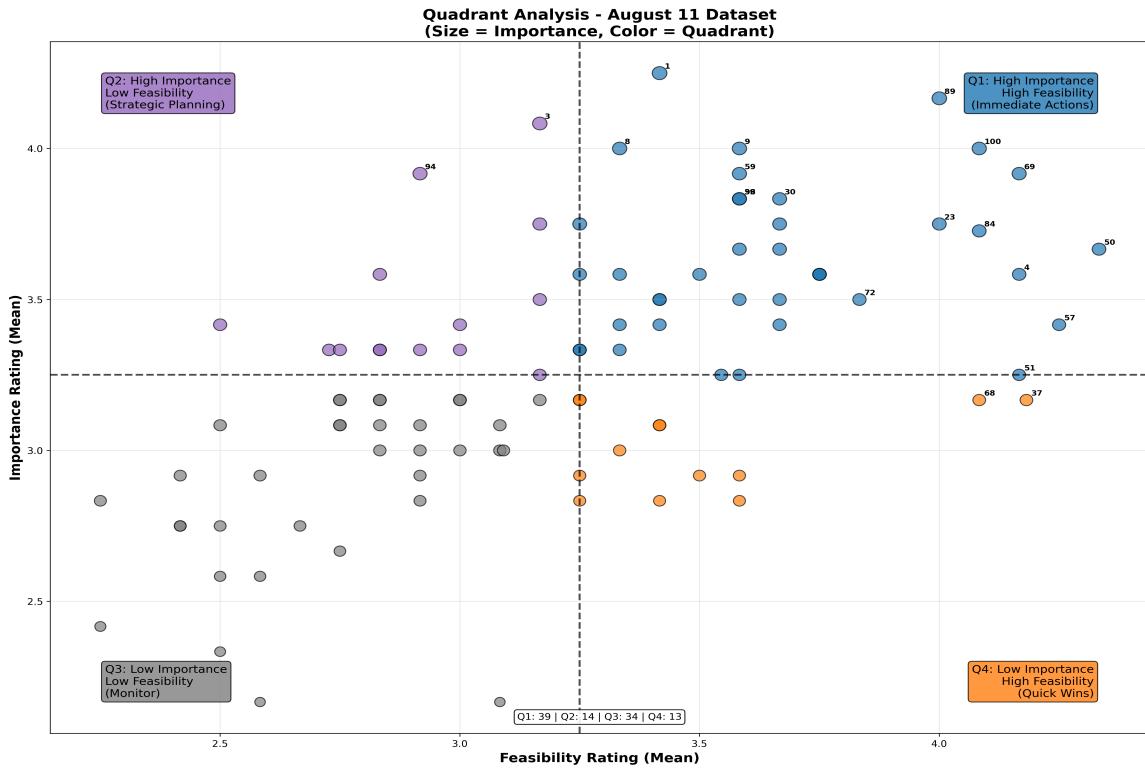
3. Visualizations

Figure 1: Importance vs Feasibility Scatter Plot



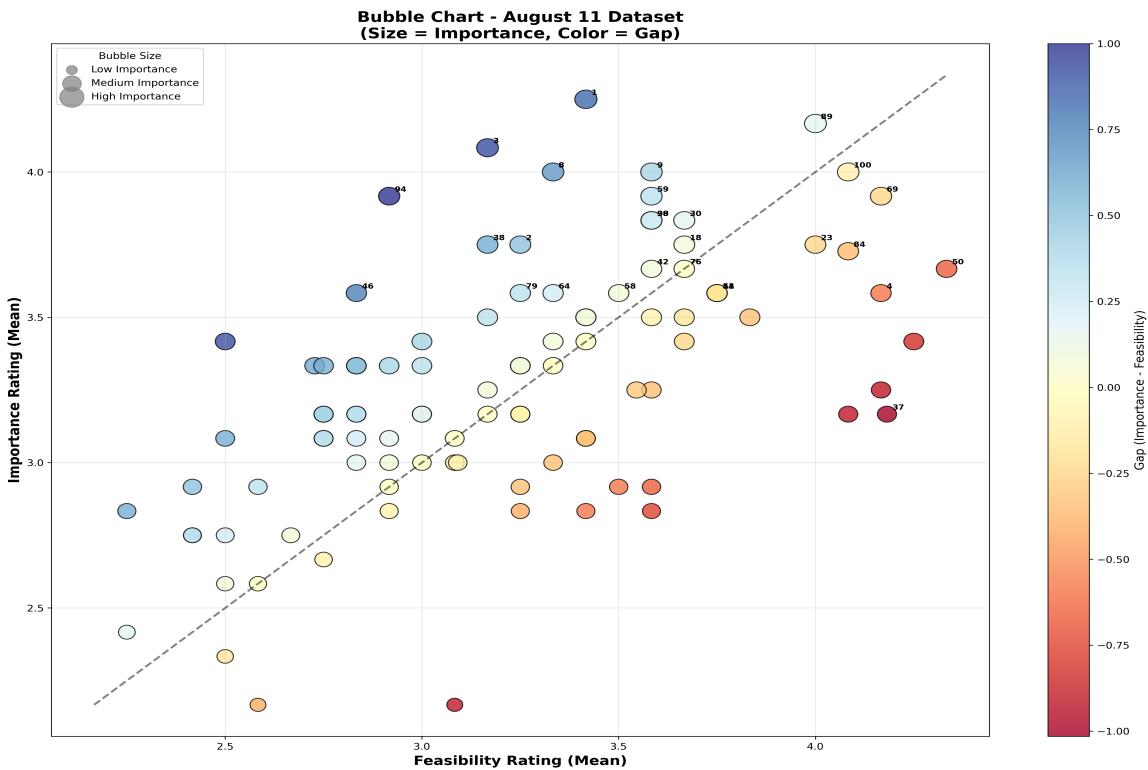
This scatter plot shows the relationship between importance and feasibility ratings for all 100 statements. The red dashed lines represent the median values, dividing the plot into four quadrants. Statements in the upper-right quadrant (high importance, high feasibility) represent immediate action items, while those in the upper-left (high importance, low feasibility) require strategic planning.

Figure 2: Quadrant Analysis



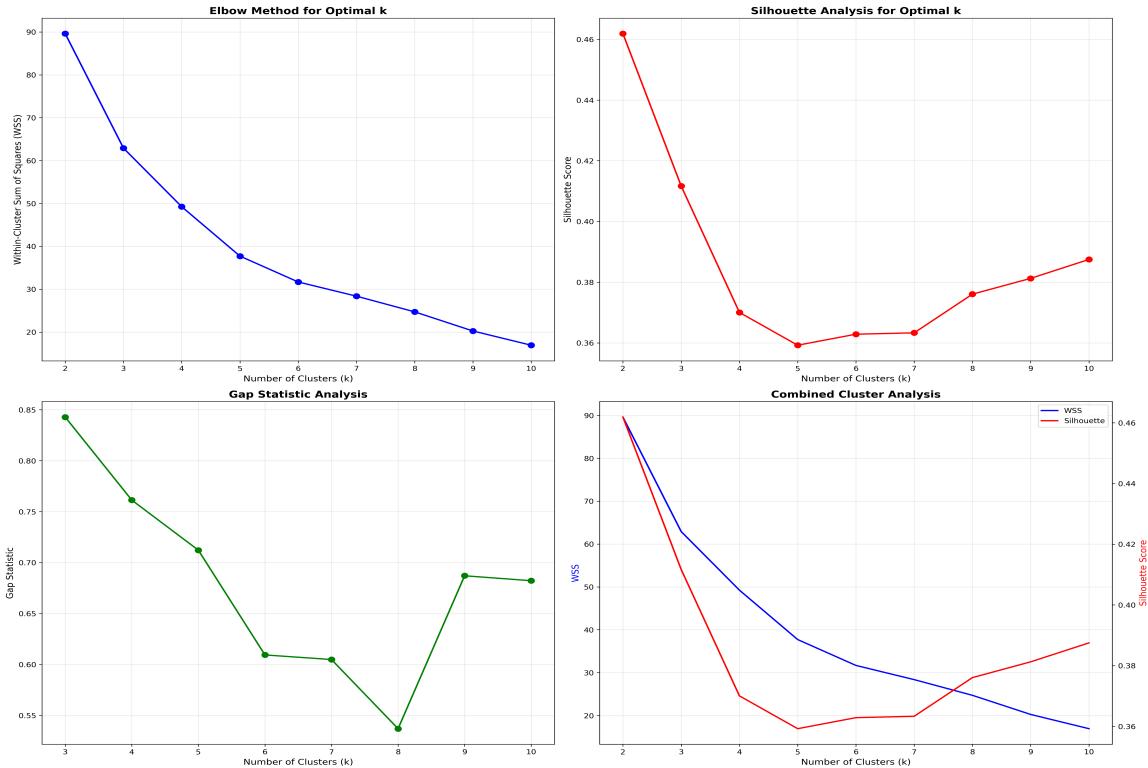
Enhanced quadrant analysis showing the strategic positioning of statements. The size of each point represents the importance rating, while colors indicate the quadrant. This visualization helps identify priority areas for implementation and strategic planning.

Figure 3: Bubble Chart Analysis



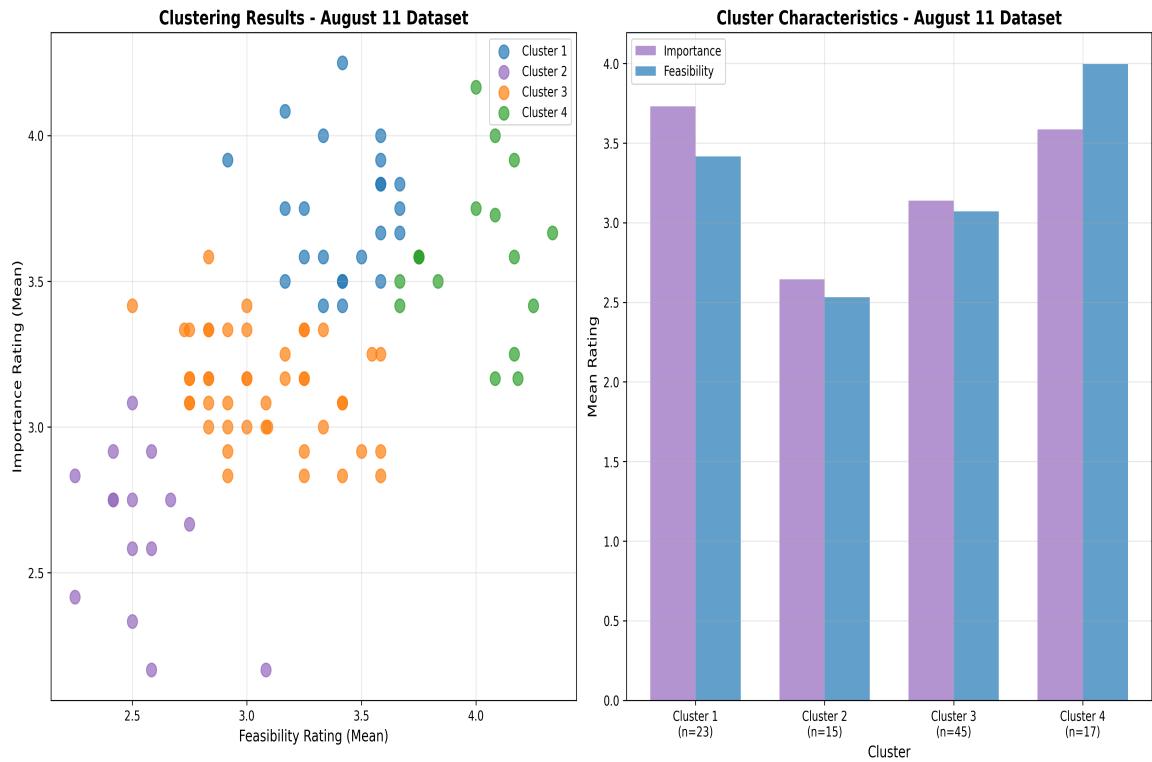
Bubble chart where bubble size represents importance and color represents the gap between importance and feasibility. Red colors indicate statements where importance exceeds feasibility (strategic priorities), while blue colors indicate statements where feasibility exceeds importance (quick wins).

Figure 4: Optimal Clusters Analysis



Comprehensive cluster analysis showing the elbow method, silhouette analysis, and gap statistic for determining the optimal number of clusters. The analysis confirms that 4 clusters provide the best balance of interpretability and statistical validity.

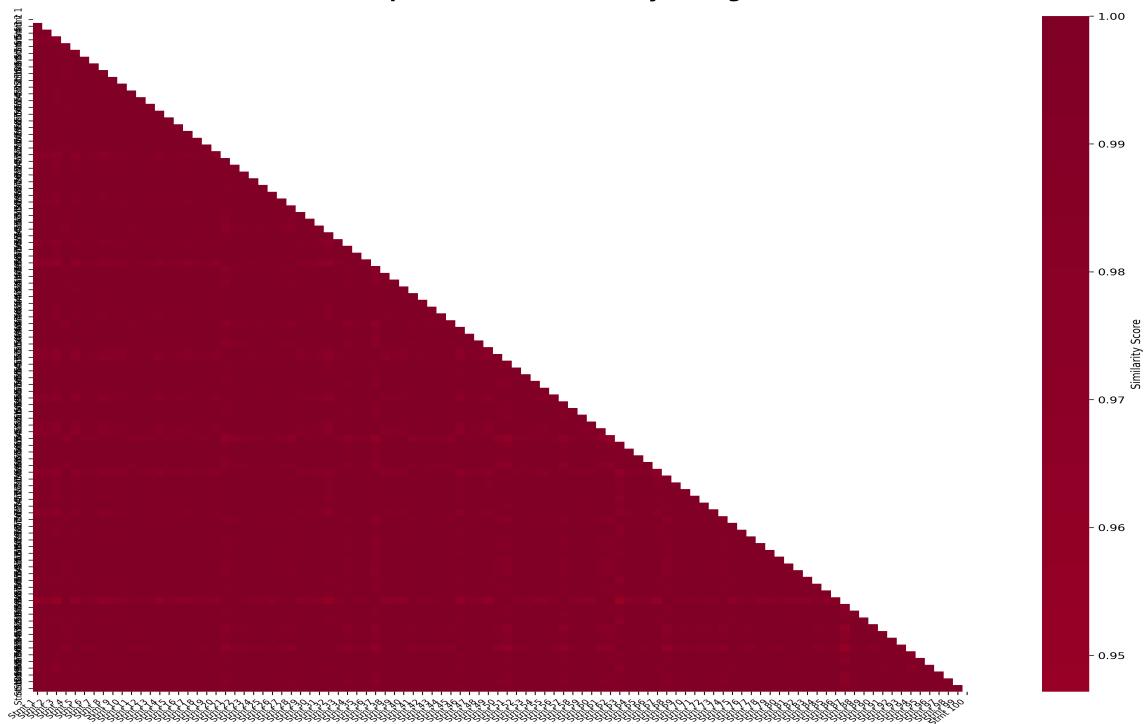
Figure 5: Cluster Comparison



Visualization of the four clusters identified in the analysis. The left panel shows the scatter plot with cluster assignments, while the right panel displays the mean importance and feasibility ratings for each cluster, helping to understand the characteristics of each group.

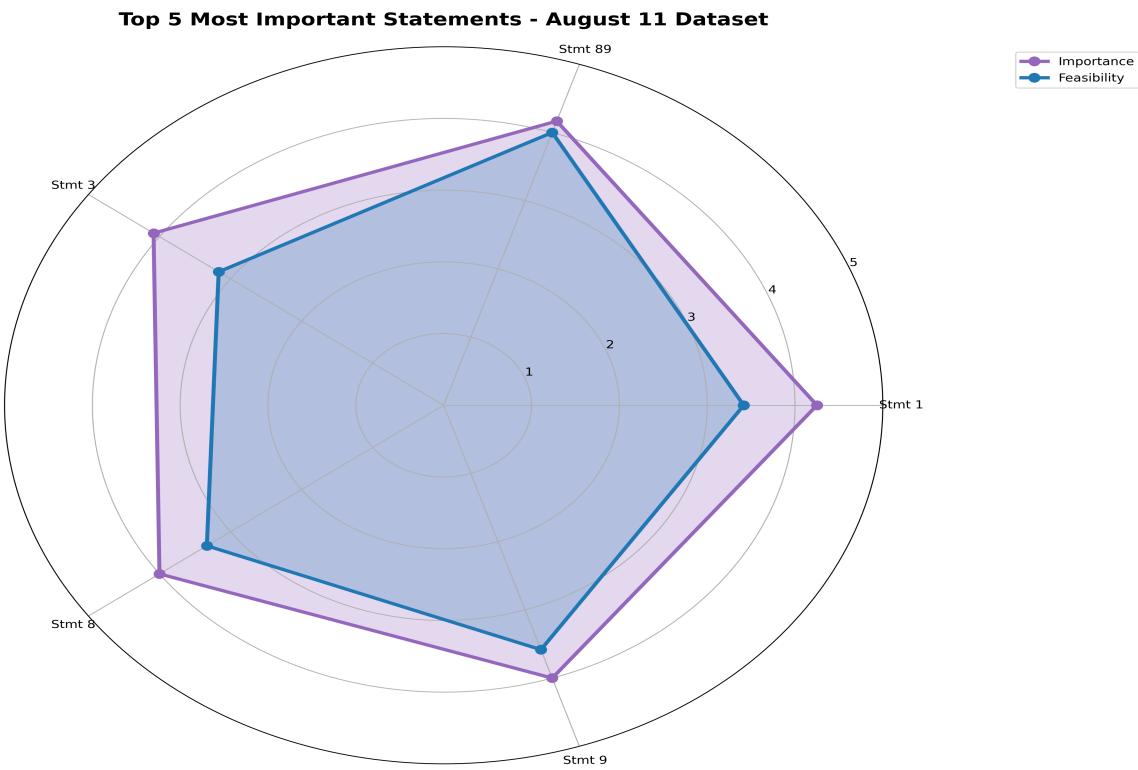
Figure 6: Statement Similarity Heatmap

Statement Similarity Heatmap - August 11 Dataset
(Based on Importance and Feasibility Ratings)



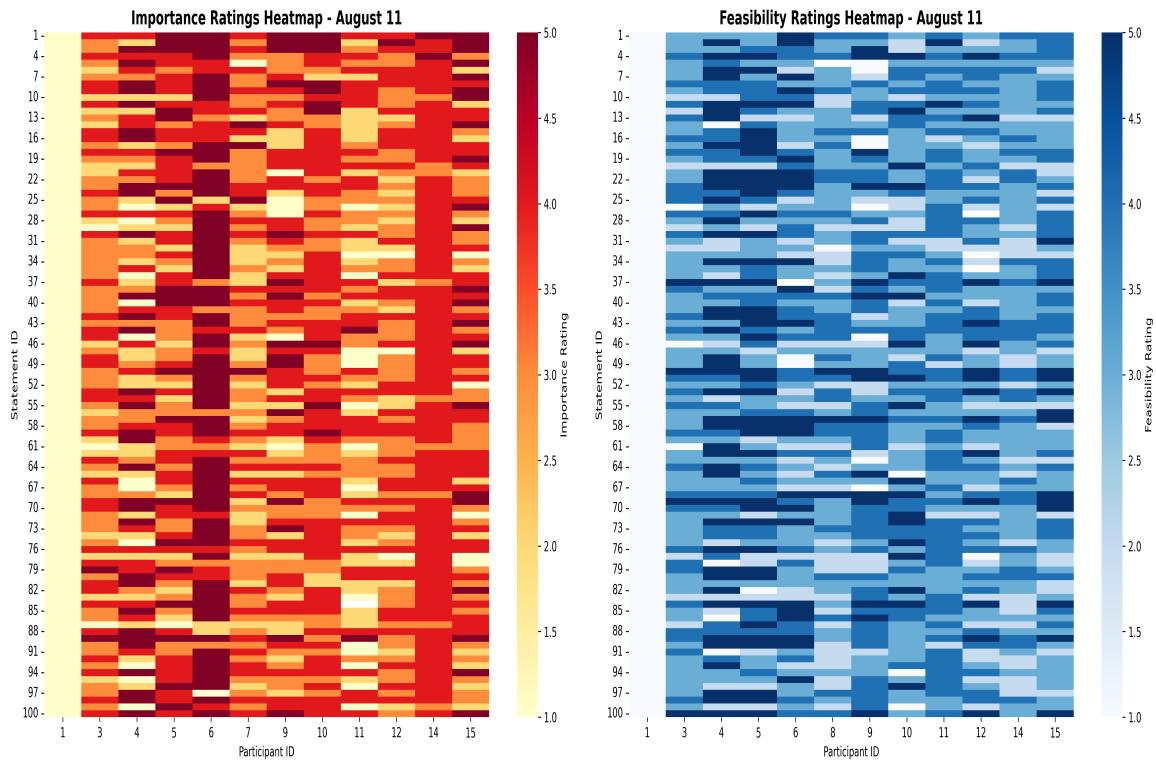
Heatmap showing the similarity between statements based on their importance and feasibility ratings. Darker colors indicate higher similarity, revealing patterns and relationships between different statements in the dataset.

Figure 7: Top 5 Most Important Statements - Radar Chart



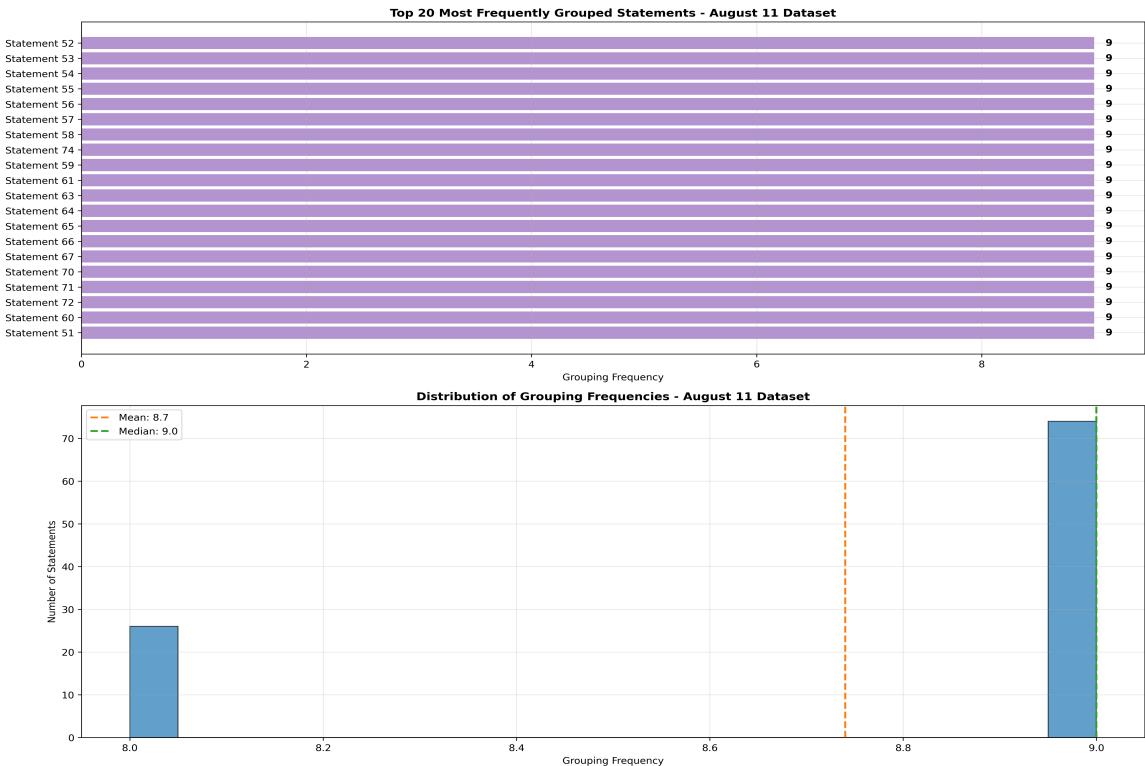
Radar chart comparing importance and feasibility ratings for the top 5 most important statements. This visualization helps identify which high-priority statements also have high feasibility for immediate implementation.

Figure 8: Importance and Feasibility Heatmaps



Heatmaps showing the distribution of importance and feasibility ratings across participants and statements. The left panel shows importance ratings, while the right panel shows feasibility ratings, revealing patterns in participant responses.

Figure 9: Statement Grouping Frequency Analysis



Analysis of how frequently statements were grouped together by participants. The top panel shows the most frequently grouped statements, while the bottom panel shows the distribution of grouping frequencies, indicating which concepts were most commonly associated.

Figure 10: Gap Analysis



Bar chart showing the gap between importance and feasibility ratings for each statement. Positive gaps indicate statements where importance exceeds feasibility (strategic priorities), while negative gaps indicate statements where feasibility exceeds importance (quick wins).

4. Conclusion

The concept mapping analysis of the August 11, 2025 BCCS AI Workshop reveals clear patterns and priorities for AI integration in cancer care. The analysis of 100 statements by 15 participants provides valuable insights into both the importance and feasibility of various AI applications. **Key Strategic Insights:** • **Immediate Action Items (Cluster 3):** 17 statements with high importance and high feasibility represent opportunities for immediate implementation. These should be prioritized for quick wins and demonstration projects. • **Strategic Planning Priorities (Cluster 0):** 23 statements with high importance but medium feasibility require careful planning and resource allocation. These represent the core strategic initiatives for AI integration. • **Balanced Considerations (Cluster 2):** 45 statements with medium importance and feasibility represent the majority of AI applications that require ongoing evaluation and incremental implementation. • **Monitor and Evaluate (Cluster 1):** 15 statements with low importance and feasibility should be monitored for future consideration as technology and priorities evolve. The analysis demonstrates that participants recognize both the potential benefits and challenges of AI integration in cancer care. The clear identification of high-priority, high-feasibility items provides a roadmap for immediate action, while the strategic planning items require careful consideration of resources, timelines, and stakeholder engagement. This concept mapping exercise serves as a foundation for developing a comprehensive AI strategy in cancer care, balancing immediate opportunities with long-term strategic planning.