

**Table 2: List of Top 20 Skills Identified by Expert Panel**

<b>Skill</b>	<b>Number of Experts Selecting the Skill (10 Possible)</b>	<b>Sum of Ranks Assigned to the Skill</b>
1. Fluency in the SQL command language	9	107
2. Defining data elements	8	121
3. Needs analysis/end user analysis. Determine how the database will meet the needs of the end users. For example, physicians may want to track patient vital signs, while administrators may want to track physician performance. Did they follow guidelines? Did patients recover faster?	7	129
4. Ability to normalize data	8	119
5. Ability to analyze end-user workflow and integrate analysis into database design	8	110
6. Use Access and SQL to create, tables, queries, and forms	8	100
7. Ability to perform data retrieval and reporting	8	74
8. Ability to perform various joins and understand their results	7	77
9. Ability to create and use if/then statements	7	62
10. Ability to create calculations and aggregate functions within queries	7	60
11. Ability to creatively solve problems	7	57
12. Ability to manage data quality	7	43
13. Ability to communicate effectively	6	106
14. Ability to listen to and understand user requests	6	93
15. Knowledge of the most common database programs	6	64
16. Ability to perform proper indexing to	6	43

enhance query performance		
17. Ability to create conceptual, logical, relational models and convert them into a physical model	5	84
18. Ability to identify common database failures	5	39
19. Ability to interpret and respond to error messages generated in Access and SQL	5	35
20. Ability to secure databases	5	32