Explain how you would use Excel, Access, and SPSS as management tools in a health organization. Discuss the strengths/weakness and benefits/limitations of each of the software programs.

Response –

Excel's strength is in creating graphs and charts to offer the data in a readable format. This can be used in an organization to show how much money is being spent on what programs and in what departments. Excel can also be used to show trends in how many visitors went to the clinic during certain hours or days during the week so a clinic can be appropriately staffed, or can be used to show funders that the program is or is not successful. The weakness is that the data is put together for the graphs, and when put into a report there is no possibility of seeing the individual data points.

Excel is the easiest of the programs to use as the program itself is very straightforward. Many calculations and graphs are available within a few clicks. The user will know what they're looking to do and can also program equations to occur within the cells. Limitations to Excel is that the program can be slow when trying to use certain functions or when dealing with a larger amount of data and that there is only a certain amount of data allowed on the sheet.

Access' strength is in sorting and organizing data. The program can be used in an health organization to track a large number of employees, injuries and claims, as well as number and when visits are made to a certain organization on a larger scale. Many different kinds of data can be pulled together in order to make reports, and reports can be maximized or minimized to see specific data in a larger group. Output can be sorted by different categories to include multiple categories or only the specific category that a user wants to search for. The downside is that the user cannot create graphs or other visual aids with the data, and that the program is more programming based than straightforward like Excel is.

Access is not as straightforward as Excel but does not have a large learning curve. This can handle large amounts of data without being slow, which may frustrate some users when using this program. However, being able to query information and being able to easily sort the data, especially a larger amount of data than Excel allows, is beneficial.

SPSS' strength is in processing data, from linear regression to Chi Squared and all the other parametric and non-parametric tests offered. This can be used to determine in studies where they are trying to determine if their null hypothesis was correct or if the alternative is correct. It can also be used to determine if there are any correlations between their program and the effects out in the community, such as increased presence in the community and the rate of a disease.

There are many, many options available as long as the user knows what they are looking to do with the data. The weakness of the program is that there is a steep learning curve to the program as the program is not as straight forward as Excel or Access may be. The user must know what type of tests will be done and must know how to read the output from the test, or they will not be able to utilize the results.

SPSS has plenty of benefits for researchers and organizations that are doing studies out in the community. Many options for testing allows for a greater range of use for the data, and the option to create different graphs based on the output is beneficial. However, the biggest limitation is that the user must understand how to read the data and what tests that need to be done on the data in the first place. This is not a straight-forward program compared to Excel.