Machine learning

Is the development of computer systems that are able to learn and adapt without following explicit instructions,but using algorithms and statistical models to analyse and draw inferences from patterns in data. The suited approach for the SmartConnect is Supervised learning and Reinforcement learning.

Supervised learning approach that learn from the training dataset can be thought of as a teacher supervising the learning process.In these approach the possible outcomes are already known and training data is also labeled with correct answers.The use of approach will be most helpful in early detection of disease ,by matching the pattern of paitent’s historial data and Support Vector Machine that works best on accumulating smaller dataset to form complex on it .The Support Vector Machine is used within the classification problem to classify those disease into correct medical condition .

Reinforcement learning approach ,These approach train the systems to make specific decisions using the trial and error method. The use of approach will be most helpful selecting best treatment for patients,as it will treat the patient’s health state as an environment .The AI agent will use to learn on to select treatments that lead to the best long-term outcomes while considering potential risks and uncertainties.It will also be most helpful remote monitoring the patient recovery according to their best unique treatment plan that best fit their unique characteristics and lifestyle.

**Appropriate Set of Algorithms:**

In the Reinforcement learning the appropriate algorithm is Deep Q-Networks ,which learn to make decisions that balance short-term rewards with long-term goals, which is crucial in healthcare where immediate gains might conflict with the overall health and well-being of a patient .