Since medication errors are a global threat for healthcare workers' and patients' safety, we tried in our study to apply Six Sigma set of steps (DMAIC) integrated into TQM tools to recommend a new technique to prevent medication error incidences in healthcare sections. According to this matrix, the selected choice was to support handwritten prescriptions by suggestion of assistant sheets; Guideline Recommendations to Improve Handwritten Prescriptions to be used by the physicians working in the Hospital. These sheets are Review Sheets in accordance with the Guideline Recommendation, Daily Review Sheets, and Indicators for Guideline. First, we defined the medication errors and determined their problems to set the objective of this study which is reducing the incidence of administrated medication doses to meet the global standards without any extra cost. The two main improvement strategies were either to improve the prescription hand writing or to eliminate them by automation. To prevent the remedy, we kept the feedback loops as short as possible.