

## **SCOPE OF WORK**

### **Introduction:**

This document outlines the scope of work for implementing inventory management system and a four-tier data hierarchy module that will enable efficient and effective management of Implant in the SSRAA portal. The module is intended to organize data into a four-tier hierarchy, with each tier representing a different level of granularity.

### **Objectives:**

The objectives are as follows:

To implement data management and bulk upload module.

To restructure the current implant form and organize the catalogue into a four-tier hierarchy to meet business requirements and enhance user experience.

To enable the creation of custom data hierarchies to meet specific business needs.

To enable users to easily navigate and access implant at different levels of granularity.

To improve data accuracy and reduce errors.

To organize all spine implants across Anterior, Posterior, Lateral, Bonegraft and all explants.

### **Features:**

**Tiered hierarchy:** The module should organize implant catalogue into a four-tier hierarchy, with each tier representing a different level of detail and granularity. The users would be able to select implants based on brand, product line or type, diameter and dimensions. Additional fields would be included such as rebate code, pricing and product code.

**Inventory Management System:** This should enable the users to manage the implant catalogue by means of bulk upload and also the users would have full CRUD access to modify the implant entries individually there by converting the current static dropdown select which needs to be hard coded to the front end to a much more convenient system that users can add their catalogue.

**Bulk Upload:** This module would enable adding implant catalogue in bulk to save time via an excel file.

**Rebuilding the implant form:** A new implant form would be built and to be able to contain a JavaScript sorting and preloaders that would utilize Ajax to call API's when a user selects a brand of implant the Ajax service calls the API related to the implant selected hereby drilling down from brand to productline or type to description to dimension, product code and price. The new implant form would have its dropdown select pick its contents from the inventory management system.

**Integration and testing:** The module should be able to integrate with the SSRAA systems to aid with reporting and analytics.

**Expectations:**

The following are expected from the four-tier data hierarchy module project:

Creating the database tables that would house the implant and bone graft catalogues.

Create a Bulk upload to serve all implants across Anterior, Posterior, Lateral/Anterolateral, SI joint and Bone graft.

Creating APIs to bring the catalogues into the implant form: There are 68 table in the implant form and would have to make API calls to fetch the brand, product line and implant description and on selection of these 3 fields the dimension, product code, rebate and price would be auto populated. This would amount to about 272 API calls.

Creating Pre loaders: This would enable all the catalogue to be preloaded across all sections of the implant form with 4 pre loaders per section and there are 51 sections which brings it to a total of 204 pre loaders.

Creating a new implant form to the proper convention due to its size being too big.

Frontend design for the Inventory Management: This would be a part of the SSRAA app where users can upload their respective catalogues and create, read, update and delete catalogue (CRUD Functionality)

Testing and Integration: This would involve testing and fine tuning the Inventory management systems on a mock up database rather than the live environment. Once everything is ok then the new features are then integrated into the SSRAA app.

Training: On final delivery Emmanuel would be trained on how to use the new features and new code structure.

**Timeline:**

The estimated timeline for the project is as follows:

Requirements gathering and analysis: Done

Design and prototyping: 1 weeks

Development and testing: 6 weeks Final

Deployment and training: 5 days

**Budget:**

The estimated budget for the project is \$56,000, which includes all costs associated with requirements gathering, design, development, testing, deployment, and training.

**Risks:**

The following risks have been identified:

The immense size of the implant form makes it quite difficult to work with and with lots of JavaScript controlling the dynamic tables on the implant form it makes more strenuous to manage.

The old data format may not fit 100 percent into the new form.

**Prerequisite:**

Access to current source code and a mock database for development and testing.