



## **Selecting the Sampled Procedures: What's the Correct Case?**

Sheena Keding, Surgical Clinical reviewer, Valley Children's Healthcare

Michael Murrietta, Clinical Decision Support Coordinator, Valley Children's Healthcare

### **Introduction**

It is imperative to maintain an efficient workflow for the SCR. Case selection using the NSQIP Sampling Strategy, is one of the components that impacts the workflow. We hypothesize that automating case selection will reduce time required of the SCR, while improving the accuracy and consistency of data.

### **Methods:**

The sampling strategy was automated using Visual Basic for Applications (VBA) within Microsoft Excel. Our programmer created a workbook called the Surgical Case Sampling Tool (SCST). Iterative validation and development occurred through collaboration with the SCR. The tool contains the list of procedures, limits on case collection, and a graphical user interface (GUI) for importing data. A database of CPT code combinations and the appropriate Principle Operative Procedure (POP) for each combination is included and is modified when new procedure code comparisons arise.

### **Results:**

The SCST has three phases of output. The first identifies cases with missing procedure codes. When these are addressed, the second output identifies cases where multiple procedure codes are used. Initially, the user is queried regarding the POP, but the iterative evaluation allows the tool to learn for future cycles. The final output is the list of cases to be included.

### **Conclusion:**

The SCST increased the accuracy of case selection. The POP database allows consistency of POP selection. Using the SCST to automate the case sampling strategy reduces the amount of time required for this process. The SCR workflow and quality of data is improved by removing the user from menial tasks, allowing time to focus on qualitative work.