

## CSC 260 Object-Oriented Design

March 2020

### Project Proposal – Automate calculating Healthcare Second Lowest Cost Plan

#### Problem Statement

Healthcare plan professionals spend too much time determining the tax credit for qualifying individuals and families receive on the marketplace. The method used for a health plan in a particular rate area is called a Second Lowest Cost Plan and serves as the benchmark health plan for a particular area.

For example, if a rate area had health plans with rates of [197.3, 201.1, 305.4, 306.7], the SLCP for that rate area would be 201.1 since it's the second lowest rate in that rate area.

A plan has a metal level which can be Bronze, Silver, Gold, Platinum, or Catastrophic. The metal level is indicative of the level of coverage the plan provides. A plan has a rate which is the amount that a consumer pays as a monthly premium in dollars and a plan has a rate area which is a geographic region in a state that determines the plan's rate.

Historically, the process for calculating the SLCP involves importing comma separated value files into spreadsheet software, typically Excel, to determine the SLCP which is the second lowest rate for a plan in the rate area.

CSV files provided to ftp drop folder locations that change frequently.

- slcp.csv – zip code list used to determine the Second Lowest Cost Plan
- plans.csv - All health plans on the marketplace
- rateareas.csv - map of ZIP code to county/counties and rate area(s)

#### Proposal Solution

To create object-oriented real-time Second Lowest Cost Plan site monitor that updates the SLCP values when new files are dropped onto the FTP folder drop locations. The Healthcare plan professionals will be able to expedite tax credit determinations for individuals and families.

#### Approximate Timeframe

Complete by the end of semester.

#### Estimate of Resources

One developer 10 hours per week for approximately 3 to 4 weeks.

#### Approval Authority

Jason Jenkins, Professor.