# Clinical Phone Triage Workflow

**An Examination of the Call Center Process in order to help future attempts at improving the Efficiency of the System.**

## The Problem

- Our client has requested for a standardized workflow for their call center to implement when answering incoming calls from patients.
- The current system used by our client has gaps that are leading the system to becoming ineffective. These gaps are also responsible for patients falling through the cracks and not receiving the help they need.
- This can be dangerous as it poses a risk to the patient's health and well-being. Thus, it is extremely important that the patient calling receives the needed care within the appropriate time period.
- The Client has asked us to find these gaps in the system. The team has concluded that the best way to do this would be to create a simulation that emulates the system as it currently stands.

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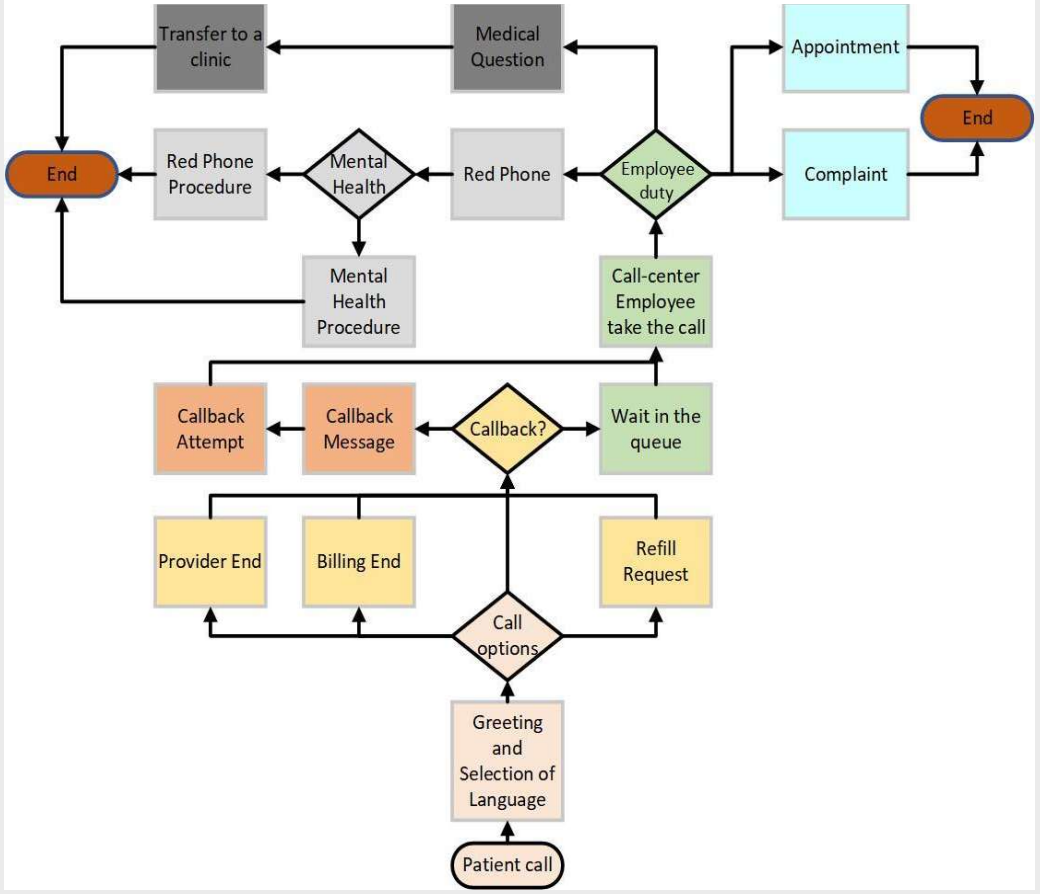
## Flowchart of the Call Center Process




## Validation of Data

- Data drawn from the simulation and the project have been compared to the data made from the actual system itself.
- The simulated Arrivals and Abandonment rates have been compared to the actual data with a 5% tolerance as the random chance involved with Arrivals and Abondments have a direct result on all of the simulated data.
- The simulated Disposition rates have been compared to the actual data with a 10% tolerance as there is more randomness involved in simulating the patients needs.

## Future plans

- Developing a more in depth simulation that would have more accurate inputs based on more data collected by the client with the specified metrics.
- Compare different simulations which represent different scenarios of the client's algorithm to test out changes in the call center.
- Setup the simulation and data analysis for future IE teams to continue working on with the client in future years.

## Simulation

- The simulation was created using Arena, a program taught at Oregon State.
- The simulation simulates patients moving through the call center and has been adapted and refined over the course of the 5 months we have worked with the client.
- The Simulation has been made to simulate even the possibility of failures, where callers leave the call prematurely or are held in queue for long periods of time.
- The hope for the simulation was to make a near perfect replication of the system as it currently is and then to test different improvements of the system to see the results in a quick way and without disrupting the actual system.

An Example of how the Simulation could look physically