

Patient Flow and Staff Scheduling for Medical-Surgical Unit

- Motivation
 - Increasing pressure on hospitals to deliver cost-efficient care
 - Need an automated, accurate way of predicting patient census to schedule staff
- Methods
 - SimPy is used to simulate patient census for a period of time that is given by user input
 - Census is updated hourly using historical data
- Results
 - Simulated census fits seasonal and hourly temporal trends
 - Code is fully documented so further improvements to simulation can be performed

