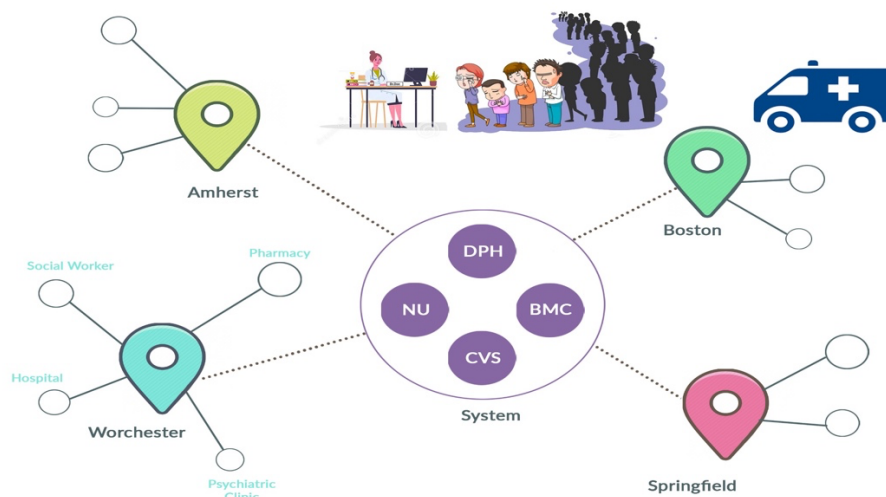


Final Project – Deadline 4/29 11:59pm EST

A hospital on-wheels is a mobile van, managed by the NU Nursing School, that moves around between different cities taking care of high risk patients. The main objective is to manage and contain the spread of contagious disease among this high-risk population. The now mobile clinical team is made up of nursing professors and students. When the team sets-up shop in different localities, they take on patients first-come first serve. The next step is a patient seen by a nurse, chief complaint recorded, vital signs are taken, diagnosis is determined, lab tests are sent to the lab, and in addition, incidents of contagious disease are recorded. All events must be scheduled and lined to a funding campaign in advance. Most visits to towns in the state are financed by the state and meant to focus on certain ethnic communities. The process is as follows:

- 1) Setup a clinic with its staff and their roles
- 2) Configure visit sites in different localities
- 3) Schedule events and link them to specific programs important to the state
- 4) Upon local setup and patient arrivals, research for patient in the clinic database and assess last time the patient was seen. If not the system, register the patient along with time, site, and event.
- 5) Take patient in for assessment and diagnoses.
- 6) Take vital signs, record chief complaint, and determine diagnoses.
- 7) The results of the tests and the diagnoses will determine if we have a contagious disease condition, then the proper persons will be notified immediately.
- 8) Cycle back to the next patient, etc.

The following shows the movement of the mobile van to different locations in the state of MA.



You are required to program the patient model we discussed in class in Java (shown below). You are also required to populate the system with data, using faker techniques. Your data must show incidents of contiguous disease determination, and that will include time, place, nature of the diagnosed condition, etc. Also, work out few cases where one HIV patient might be the cause of the spread of the disease in one particular community.

Questions:

- 1) List all patients, the times they showed up, and the locations there they showed up for checkups.
- 2) Prepare a report to show the list patients who show symptoms contiguous disease that are of concern.
- 3) Provide functionality to help identify and show patients that might be deliberately infecting others.
- 4) Identify any additional features that could help doctors, nurses, and the department of public health more effectively contain the spread of contiguous disease in the community.

