

“What if?” Question

What would be the impact on nurse utilisation and patient waiting times to see the nurse for test and clinic activities if the nurse also ran quit smoking consultations as part of the weight loss clinic?

What would be the gain in terms of waiting times and reduced nurse utilisation if a second nurse was brought in to run a dedicated separate quit smoking clinic?

Inter-Arrival Times :

- Arrivals waiting for weight loss consultation
- Arrivals waiting for quit smoking consultation
- Times between GP patient tests

Entities :

- WL Clinic Patients
- SS Clinic Patients
- Test Patients

Activity Times :

- Time spent in weight loss consultation
- Time spent in quit smoking consultation
- Time spent having test performed

Outputs :

Mean, min, max, 95th & 5th percentile of :

- Nurse utilisation
- Q time for each queue
- Q length for each queue

¹Possible
reneging
behaviour

²Possible
balking
behaviour

Generator
People arriving
for weight loss
consultation

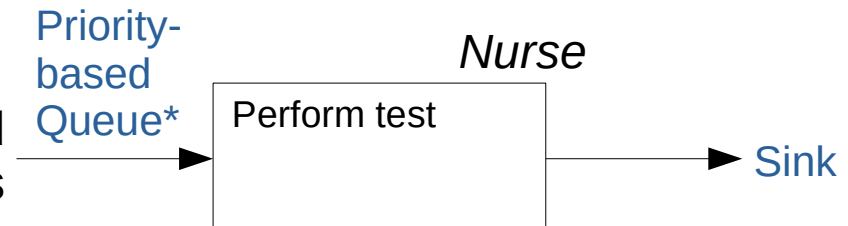
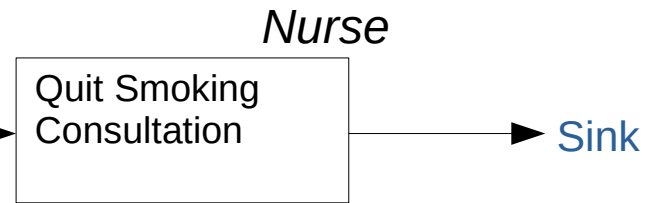
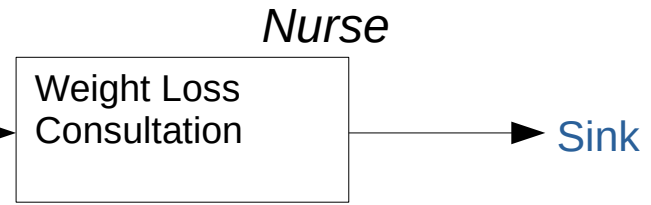
Generator
People arriving
for quit
smoking
consultation

Generator
Tests booked
for GP patients

Queue
FIFO^{1,2}

Queue
FIFO^{1,2}

Priority-
based
Queue*



Entity Attributes

WL Clinic Patients

(none)

SS Clinic Patients

(none)

Test Patients

- Test needed (to determine distribution for activity time)
- Appointment time (for priority)

*Priority given to test patients over weight loss and smoking clinic patients. Within test queue, patients prioritised according to appointment time, even if patient with later appointment turns up earlier.