What are the variables of the simulation?
Resources – Wheelchairs / Stretchers / Zoom Stretchers(11) / Oxygen Tanks
Patient wait time / Porter response time
Porter locations and availability (Variablility in needs of different sites from hour to hour)
Events / Jobs – Priority (Assist Call Highest, then 0 to 9)
40% new wing with pneumatic tubes / 60% old site.

Who will be using the simulation?
Director of Operations? Site Manager? Dispatch Manager?

What do you expect to receive as output from the simulation?
Output as Excell provides a lot of information and can be easily manipulated.

How do you expect to modify values of the simulation?
Altering Excell values and exporting them to the simulation is recommended.

What kind of user interface do you expect/want?
Excell spreadsheets are often used for input and output of values. Depending on the final number of adjustable variables some other system may prove more efficient.

How do you intend to specify the layout of the simulation?
Probably will hard-code framework and run events and resources on it.

How much control is expected over the scheduling portion of the simulations (preprogrammed schedulers/scripting language)?
???

What are the different states that a porter can have?
Events begin as [Pending] and are matched to a free porter.
When the porter accepts the job, it becomes [Dispatched].
The job is in [In Progress] when the porter leaves the origin of the job.
The job is [Complete] when the patient arrives at the destination. The porter becomes free again and will accept a new job from their current location.

Can we get walk through of a porters typical workflow?
See above, but we will get a better idea during a walkthrough of a real-time event.

What different types of equipment would a porter be expected to handle and are there any constraints with specific equipment?
On some steep paths 2 porters are required for regular stretchers.

Is there a variation in porter ability?
Some, but probably outside of the scope of this simulation.

Are there any security requirements for the software?
None really.

Are porters partitioned to different sections of the hospital?
Most on-system porters move throughout the hospital based on job completion during the day.

Extra Notes:

We are trying to convince skeptics with our output that if specific changes are made, the benefit is obvious. Create best case scenarios for reducing patient wait time and maximize resource usage.

Show how typical weeks change throughout the year, and if trends can be used to advantage.

Show how Patient flow is benefited by changes. (More wheelchair use vs. Stretchers, scheduling modifications, more use of pneumatic tubes.)

Jobs can be grouped into batches if they share similar characteristics, usually location.

Porters can call Assist mode for help moving a patient. Assist has higher priority than 0.

RDE? System to view porter jobs and their progression.

Negative factors – Misplaced equipment / transit paths blocked or detoured.

- hour by hour variability of labour need is very high.
- Lack of cooperation between sites and use of prebooking systems (“Proactive Page”)
- 60% - 70% of transfers are long site to site movements.
- Lack of control due to multiple agencies coordinating (Clinic time / table time / stay time)
- Patient populations are not located nearest to their most regularly visited sites, resulting in long transfer times.
- Collective Agreements mean regular length shifts and steady hours weekly. (As opposed to scheduling more staff for short shifts on high volume times.)
- Abuse of scheduling system and lack of motivation possible. (break-3 job status allow for limbo porters when taking off-system jobs)