



## Maths as others see it

*The Whittington Hospital*

### Mark Hanson:

Just nine minutes to go now until the news on the hour. We'll be back straight after the break with two more records to take us to the news.

### Emma Prescott:

... but she's a different girl.

### Patient:

She looks good.

### Emma Prescott:

It's very important that we use the machine to ensure that the flow rate is correct – so that you get exactly the right amount of drug per hour.

### TREVOR ARNOLD

My porters and domestics are responsible for cleaning the whole of the hospital – the theatres, the wards, the corridors ...

This corridor is about 75 metres long, but it's not that simple. It's full of little nooks and crannies that have to be accounted for. We measure them separately and come up with the total figure. I know how long it takes.

### Receptionist:

Hello, Porters.

### Trevor Arnold:

We've got porters that look after the routine. Regular collection and deliveries of things like linen, refuse, medical records, the pharmacy. People that carry out those type of duties are our Logistics Team.

### Dominic Amos:

There's a lot of judgement you've got to do in this work, because you've got to judge, like, where are you going to go to first, second, third, fourth and so on, and if you can't get that right, you can't do the job.

Another role that our porters carry out is the Rapid Response Team. These people are responsible for responding quickly to calls for moving patients from A to B, occasionally for equipment as well. And also, importantly, we've got to maintain the cleanliness of the hospital, and that falls to our FSAs, the Facility Service Assistants.

A ward area is an awkward shape – lots of nooks and crannies. It's almost impossible to know how long it's going to take to clean. So what I do instead is I break it down into manageable chunks. Look at each of the areas in turn and break them down as well.

Hi Carlos, how's it going?

### Carlogero Marziano:

I'm all right ...

### Trevor Arnold:

I used to have to calculate, in long hand, masses and masses of paperwork – sheets of A4.

Now, I use a simple spreadsheet on a computer. The spreadsheet calculates for me the square area. At the top you can see the circulation area; that's the corridor. That particular piece of the corridor, it's two by two point six metres. I've told the computer that it takes point

one seven three minutes to clean a square metre of floor area. Times the frequency – it's cleaned seven times a week. It already knows the dimensions of the room from these two boxes. In this box I've put a formula that looks at all of those factors and calculates the time to clean the floor for me – just under six point three minutes. The whole thing I can put in there, and once it's on that system it's there for as long as I want it, and it'll do the calculation for me every time.