

Freedom of Information Request

Ref: 24-335

24 April 2024

By Email

Dear Sir/Madam

Thank you for your request for information under the Freedom of Information Act 2000. The Trust's response is as follows:

- We can confirm that we do hold the information you are requesting

1. Does your organisation employ or utilise the use of logistical robots, or advanced equipment that can assist in operational tasks in a healthcare setting?

- Please select all box(es) that apply. If nothing applies, please proceed to Question 5.

- In the case the robot is multifunctional, please select one that best suits its primary purpose.

- In the case of multiple models and manufacturers under one application, please use the extra page given at the end of this form.

- For the purpose of this study, we are looking at logistical and supporting robots, with the exclusion of surgical and clinical robots (C-Arm, phlebotomy robots, exoskeleton/therapy robots, etc.). The term 'robot' used in this study refers to an advanced equipment or hardware that has an autonomous capability and can operate with minimal to no human intervention.

☐ **Delivery or transportation robots (delivering inpatient meals, empty food trays, medicines, samples/specimens, linen, etc.)**

No

If yes, could you please give a general specification of the product/s:

Main delivery item : Food / Medicine / Specimen / Linen / Other

If Other :

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable.

☐ **Customer service/helper/care robot (greeting and assisting visitors in wayfinding and digital check-in, choosing inpatient meal options, etc.)**

No

If yes, could you please give a general specification of the product/s:

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable.

☐ **Waste management robot (transporting waste, sorting waste, recycling, etc.)**

No

If yes, could you please give a general specification of the product/s:

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable.

☐ **Cleaning or disinfecting robot (vacuuming, mopping, scrubbing, UV disinfecting, etc.)**

No

If yes, could you please give a general specification of the product/s:

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable.

☐ **Pharmacy robots (sorting, storing, dispensing, etc.)**

Yes

If yes, could you please give a general specification of the product/s:

Bristol site:

Manufacturer: Becton Dickinson

Model: Rowa

Year of installation: 2013

Generation: First/ Second/ Third/ Others Second
Other functions?: Ward stock replenishment

Weston site:

Manufacturer: Becton Dickinson

Model: Rowa

Year of installation: 2017

Generation: First/ Second/ Third/ Others First

Other functions?: Ward stock replenishment

☐ **Manual handling robots (goods reception, sorting, storing, etc.)**

No

If yes, could you please give a general specification of the product/s:

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable

☐ **CSSD robots (sterile instrument automatic storing, packaging, delivering, etc.)**

No

If yes, could you please give a general specification of the product/s:

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Other functions? :

Not applicable

☐ **Other logistical robots**

No

Application/purposes :

Manufacturer :

Model :

Year of installation :

Generation : First/ Second/ Third/ Others

Not applicable

2. Was the installation of the robot(s) part of the hospital's development (as a new build, refurbishment, department enhancement, renovation, etc.) or a dedicated retrofit?

No

3. When planning the use of robots, could you please tell us of any design decision(s) or adjustment(s) needed, if any, that was made to the hospital infrastructure and building design to enable their use? (E.g. installation of automatic doors, dedicated FM routes, adjustment to lifts etc.)

No

4. What were the main intentions behind the decision to implement the robot(s)? What evidence-based factors supported the decision to implement the robot(s) i.e., savings projection?

Choose all that apply

- ☐Easing staff physical workload ✓
- ☐Increasing efficiency of task ✓
- ☐Repurposing staff time for patient-centric tasks ✓
- ☐Reducing human error ✓
- ☐Maximising working hours ✓
- ☐Others, please explain below_____

Choose all that apply

- ☐Easing staff physical workload ✓
- ☐Increasing efficiency of task ✓
- ☐Repurposing staff time for patient-centric tasks ✓
- ☐Reducing human error ✓
- ☐Maximising working hours ✓
- ☐Others, please explain below_____

Have the robot(s) delivered the benefits envisaged when first considering using them? Please could you outline the positive and negative impacts of the robot(s) to the staff, patients, visitors, the hospital environment, and other stakeholders in the hospital:

Type of Robot Impacts

How does it serve its purpose?

By delivering medicines in an efficient and safe manner

Are benefits realised in time and labour saving and operational efficiency?

This is not recorded

Is the system reliable?

Yes

Is there a high uptime and is maintenance manageable?

Yes

How does it affect its surrounding?

It has increased our storage ability/capacity for medicines

How do the staff and patient interact with it?

Only pharmacy staff interact with it and find it easy to use and manage

Are you considering the continuity or increased use of this type of robot?

Not currently

5. Please only answer these questions if you are unable to answer Question 1-4

a. Has the organisation considered implementing logistical robots?

☐ Yes

☐ No

b. If yes, is the organisation going to implement logistical robots in the next 5 years?

☐ Yes

☐ No

If yes, what kind of logistical robot(s) and what is its intended purpose(s)?

Choose all that apply

☐ Delivery or transportation robots

(Delivering inpatient meals, empty food trays, medicines, specimens, linen, etc.)

☐ Customer service/helper/care robot

(Greeting and assisting visitors in wayfinding and digital check-in, choosing inpatient meal options, etc.)

☐ Waste management robot (transporting waste, sorting waste, recycling, etc.)

☐ Cleaning or disinfecting robot (vacuuming, mopping, scrubbing, UV disinfecting, etc.)

☐ Pharmacy robots (sorting, storing, dispensing, etc.)

☐ Pharmacy robots (sorting, storing, dispensing, etc.)

If yes, could you please give a general specification of the product/s:

☐ Manual handling robots (goods reception, sorting, storing, etc.)

☐ CSSD robots (sterile instrument automatic storing, packaging, delivering, etc.)

☐ Other, please explain_____

c. If No, please share some of the reasons why you are not going to consider implementing logistical robots or decided not to proceed:

Choose all that apply

☐ Cost of the robot(s)

☐ Limited funding / higher priorities towards other areas of improvement

☐ Lack of evidence supporting the effectiveness and functionalities of the robot(s)

☐ Lack of requirement due to ease of recruitment for human personnel/manpower

- ☐Complexity in implementation (lengthy business case, etc.)
- ☐Requirement for staff training
- ☐Existing infrastructure preventing the installation of enabling works (guide routes, automatic doors, wide corridors, sufficient vertical access, etc.)
- ☐Staff uncertainty/unease towards new technologies and possible replacement of staff
- ☐Satisfactory solution already exists, i.e., pneumatic tube, cage tug, contracted out food/linen service
- ☐Others, please explain _____

6. Please could contact details be provided of anyone within the Trust who would be willing to take part in a more detailed discussion about automating logistical processes?

Please contact procurement@nbt.nhs.uk

This concludes our response. We trust that you find this helpful, but please do not hesitate to contact us directly if we can be of any further assistance.

If, after that, you are dissatisfied with the handling of your request, you have the right to ask for an internal review. Internal review requests should be submitted within two months of the date of receipt of the response to your original letter and should be addressed to:

Data Protection Officer
University Hospitals Bristol and Weston NHS Foundation Trust
Trust Headquarters
Marlborough Street
Bristol
BS1 3NU

Please remember to quote the reference number above in any future communications.

If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF

Publication

Please note that this letter and the information included/attached will be published on our website as part of the Trust's Freedom of Information Publication Log. This is because information disclosed in accordance with the Freedom of Information Act is disclosed to the public, not just to the individual making the request. We will remove any personal information (such as your name, email and so on) from any information we make public to protect your personal information.

To view the Freedom of Information Act in full please click [here](#).

Yours sincerely

Freedom of Information Team
University Hospitals Bristol and Weston NHS Foundation Trust