***Logistical Robots in Healthcare Environments***

*In the UK, there are a limited number of hospitals employing automated technologies for carrying out non-nursing activities’ such as delivering food trays and housekeeping services food, linen, and waste and around 40% of nurses’ time is dedicated to ‘non-value adding’ and ‘non-nursing activities’. We are undertaking a survey via Freedom of Information to better understand the current use of logistical robots in the UK hospitals, their impacts, the decisions behind the implementation (or non-implementation) of the robots.*

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.*

[ ] Delivery or transportation robots (delivering inpatient meals, empty food trays, medicines, samples/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.)

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

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

[ ] Other logistical robots

NONE OF THE ABOVE.

1. **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?**

**N/A**

1. **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.)

**N/A**

1. **What were the main intentions behind the decision to implement the robot(s)? N/A**

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| **Type of Robot** | **Purpose of Use** |
|  | *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\_\_\_\_\_ |

1. **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** (e.g time and labour saving, cost saving, operational efficiency, reliable system, high uptime, manageable maintenance, good interaction with staff and patient, etc.)

N/A.

1. **Is the organisation considering implementing logistical robots in the next 5 years? No.**

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

**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

[x] Satisfactory solution already exists, i.e., pneumatic tube, cage tug, contracted out food/linen service

[ ] Others, please explain\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_