

SUPPLEMENTARY TABLE 2: description of contributions

| Author, year of publication | Description of the contributions | Role of the pharmacist | | Method used | | | | | Targeted health product | | Targeted stage in the pharmaceutical circuit | | | | |
|--------------------------------|---|------------------------|---------|-------------|------------------|---------------------------|-----|--------------------------------|-------------------------|----------------|--|---------------|---------------|---------------|-------------|
| | | Pilot | Support | Survey | Waste collection | Quality management method | LCA | Theoretical/Practical training | Medications | Medical device | Purchasing/procurement | Prescription* | Preparation** | Dispensing*** | Elimination |
| Rouvière <i>et al.</i> , 2022 | Implementation of monthly working group meetings | | | | | | | | | | | | | | |
| [9] | Monthly bulletin for raising awareness about eco-health. | | | | | | | | | | | | | | |
| | Execution of: - 7 waste reduction actions - 5 waste sorting actions - 1 action on eco-responsible purchasing - Evaluation of cost differences associated with these interventions. | X | | X | X | | X | X | | X | X | | | | X |
| Giraud <i>et al.</i> , 2022 | Identification of 30 regulatory and non-regulatory criteria related to the procurement of healthcare products and SD. | | | | | | | | | | | | | | |
| [10] | Creation of a questionnaire for healthcare product suppliers to assess their level of environmental "maturity." | X | | X | | | | | X | X | X | | | | |
| | Creation of a questionnaire for healthcare product buyers to assess the integration of SD criteria into their procurement procedures. | | | | | | | | | | | | | | |
| Singleton <i>et al.</i> , 2022 | Semi-structured interviews with hospital pharmacists conducted by a pharmacist. | | | | | | | | | | | | | | |
| [11] | Topic of the questions: awareness of the existence of NHS SD working groups; barriers to the integration of SD into their decision-making; the pharmacist's role in overcoming these barriers and incorporating SD into clinical decisions. | X | | X | | | | | X | X | X | X | | X | X |
| Mouarbes <i>et al.</i> , 2022 | Creation of a custom pack for anterior cruciate ligament reconstruction surgery. | X | | X | X | | | | | X | X | | | | X |
| [12] | Study of the three pillars of SD: | | | | | | | | | | | | | | |

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| | 1- Environmental: assessment of the difference in weight and the quantity of waste related to the surgical equipment. 2- Social: calculation of the difference in equipment preparation time; analysis of musculoskeletal disorder factors; surgeon satisfaction survey regarding the implementation of the custom pack. 3- Economic: evaluation of the cost difference of the instruments used. | | | | | | | | | | | | | | |
| Leraut <i>et al.</i> , 2022 [13] | Qualitative and quantitative analysis of medications administered through an inhaler in urban and HF. Literature review to extract the carbon footprints per inhaler-administered medication box. | X | | | | | X | | X | | | | | X | |
| Mohammed <i>et al.</i> , 2021 [14] | Inventory of returned/wasted healthcare products in HF. Creation of a questionnaire for pharmacy staff, divided into two parts: 1- Sociodemographic data 2- Pharmaceutical waste disposal methods. | X | | X | | | | | X | X | | | | | X |
| Barbariol <i>et al.</i> , 2021 [15] | Literature review and preliminary study to select the most wasted medications (selection of 11 medications). Recording of the preparation and administration time of medication syringes by nurses. Inventory of the number of wasted syringes (prepared but ultimately not administered). Estimating the cost of wastage. | | X | | X | | | | X | | | | X | | X |
| Gidey <i>et al.</i> , 2020 [16] | A pharmacy student conducted interviews with patients collecting treatments from the hospital pharmacy. | X | | X | | | | | X | | | | | | X |

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| | Creation of a 2-part questionnaire: 1- Sociodemographic data 2- Knowledge of how to dispose of unused and out-of-date medicines. | | | | | | | | | | | | | | |
| Alhomoud, 2020 [17] | Creation of a questionnaire assessing the feasibility and importance of activities that could be implemented by pharmacists to reduce drug wastage. | X | | X | | | | | X | | X | X | X | X | X |
| Tsang <i>et al.</i> , 2019 [18] | Overview of the most commonly used refrigerated medicines in the OR. | | | | | | | | | | | | | | |
| | Twice-weekly reminders of the procedure for returning unused medicines to the pharmacy by e-mail and verbally. | | | | | | | | | | | | | | |
| | Provision of the most commonly used refrigerated medicines directly in mini-fridges in the ORs. | X | | | X | | | X | X | | | | | X | X |
| Lin <i>et al.</i> , 2018 [19] | Collection by pharmacy assistants of medicines intended for disposal and calculation of associated costs. Collected before and after the operation. | | | | | | | | | | | | | | |
| | Mapping of intravenous pharmaceutical compounding production flows to identify non- value-added tasks. | | | | | | | | | | | | | | |
| | Increasing the production frequency of pharmaceutical compounding batches from 3 to 5 batches per day. | X | | | X | X | | | X | | | | X | | |
| | Increased use of already reconstituted medicines. | | | | | | | | | | | | | | |
| | Identify the number of doses wasted (dispensed but not administered) and calculate the associated costs. | | | | | | | | | | | | | | |

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| Bekker <i>et al.</i> , 2018 [20] | Creation of an open online questionnaire to list waste reduction activities implemented by pharmacists. Creation of a second questionnaire to assess the importance and feasibility of these activities. | X | | X | | | | | X | | X | X | X | X | X |
| Abbasi <i>et al.</i> , 2017 [21] | Counting the number of sterile pharmaceutical compounding returned to the pharmacy because they were not administered to patients within the allotted time. Increase in the frequency of production of batches of pharmaceutical compounding, from 2 batches to 4 batches per day. | X | | | | X | | | X | | | | X | | |
| Furukawa <i>et al.</i> , 2016 [22] | Using quality tools to analyse the healthcare product distribution circuit: process mapping with problem identification, brainstorming, the five whys, impact/effort matrix. Applying the Lean Six Sigma method to leverage the results of quality tools. Developing an action plan describing the actions to be implemented, the stakeholders, and the completion deadlines. | X | | | X | X | | X | X | X | | X | | X | X |
| Al-Shareef <i>et al.</i> , 2016 [23] | Creation of a questionnaire in three parts: 1- Demographic data 2- Quantification and characterisation of expired and unused medications at home 3- Attitude and method of disposing of these medications | X | | X | | | | | X | | | | | | X |

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| Mosquera <i>et al.</i> , 2014 [24] | Theoretical training sessions on the disposal of healthcare waste in various areas, including pharmacy. | | | | | | | | | | | | | | |
| | Pre-training assessment of healthcare waste management in each department. | | X | | X | | | X | X | X | | | | | X |
| | Weighing of care waste before and after the operation. | | | | | | | | | | | | | | |
| | Sending an improvement report to each department with waste sorting recommendations | | | | | | | | | | | | | | |
| Toerper <i>et al.</i> , 2014 [25] | Creation of 108 different production schedules varying the preparation frequency, preparation schedules, and preparation times. | X | | | | X | | | X | | | | X | | |
| | Implementation of the ideal calendar. | | | | | | | | | | | | | | |
| Total | | n= 15 (88%) | 2 (11%) | 9 (52%) | 7 (41%) | 4 (23%) | 2 (11%) | 4 (23%) | 15 (88%) | 7 (41%) | 6 (35%) | 4 (23%) | 5 (29%) | 6 (35%) | 12 (70%) |

* Prescription (prescription receipt, prescription validation)

** Preparation: pharmaceutical compounding, dosage form *on demand*

*** Dispensing/distribution of care services