

NHS Wales Shared Services Partnership

BUSINESS
REVIEW



Agenda

NWSSP

September 2023



Contract Review

Introduction

Pilot Review

- Sustainability Metrics
- Commercial Overview
- Usage KPI's
 - Waste Volumes
 - Container Turns
- Pilot and User Feedback
- Needlestick incident review
- Commercial Opportunity and next steps

Your Sharpsmart Team

The team proud to partner with you:



Kerry Higgins

Commercial Operations
Manager



Joe Proctor

Field Service Manager



Shaun Vause

Southern Operations
Manager



Guy Wing

Contract Manager

Environmental Impact of the Sharpsmart Safety Engineered Device



Over 3 months we have prevented the purchase of 1,235 sharps containers



Meaning 0.73 tonnes of single-use plastics have not been produced and incinerated



Saving 4.08 tonnes of CO2 emissions.



Which is the equivalent of a Cardiff bus travelling 1,836 miles

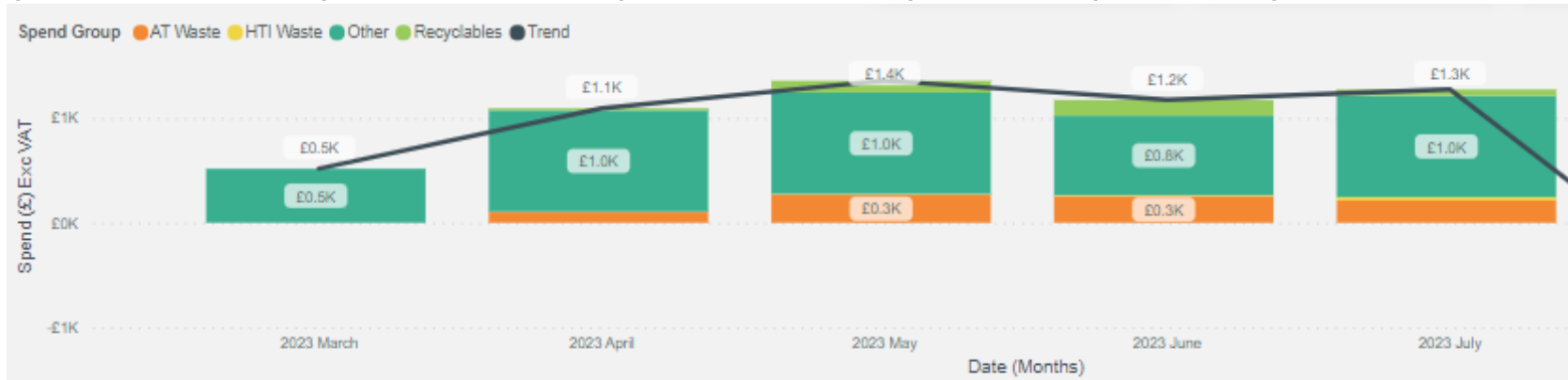


Pilot Performance vs Proposal forecast

Option One: Fixed Monthly Fee

Following from the provision of accurate data for the current usage of sharps containers Sharpsmart have calculated the forecast monthly cost of supplying reusable containers, based on the required number of container 'turns'. This will be charged at a fixed monthly fee covering the supply and collection of the Sharpsmart system based on 1/12th of annual forecasted usage. (see Appendix 1)

Estimated Monthly Container Turns	Monthly Container Fixed Fee	Monthly Waste Output	Monthly Waste Fee	Total Monthly Fee
112	£ 966.59	0.586	£ 498.52	£ 1,465.11



Account Name	Site Name	Spend Group	Year	Charge Type	2023	Total						
					March	April	May	June	July	August	Total	
Wrexham Maelor Hospital	Wrexham Maelor Hospital	Other			£516.62	£966.59	£966.59	£759.28	£966.59	£-805.49	£3,370.18	£3,370.18
		AT Waste				£103.26	£269.26	£254.24	£212.81		£839.57	£839.57
		Recyclables				£20.16	£114.66	£150.37	£61.50		£346.69	£346.69
		HTI Waste				£4.05	£6.85	£9.71	£32.92		£53.53	£53.53
		Total			£516.62	£1,094.06	£1,357.36	£1,173.60	£1,273.82	£-805.49	£4,609.97	£4,609.97
Total	Total				£516.62	£1,094.06	£1,357.36	£1,173.60	£1,273.82	£-805.49	£4,609.97	£4,609.97



Site Name

All

Waste Group

All

Billing Period

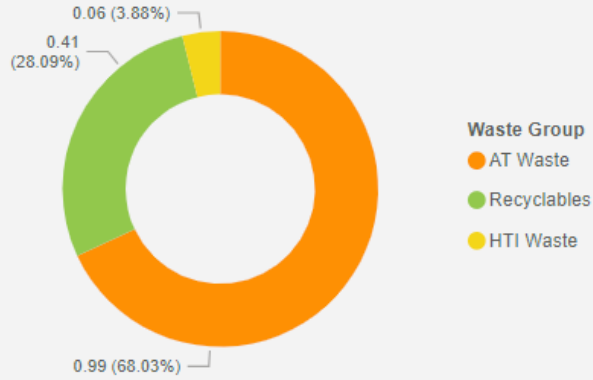
Last

12

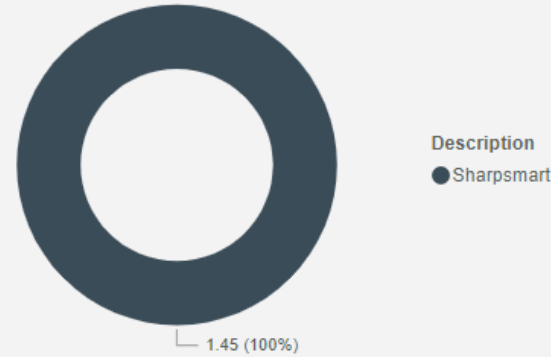
Months (Calendar)

9/1/2022 - 8/31/2023

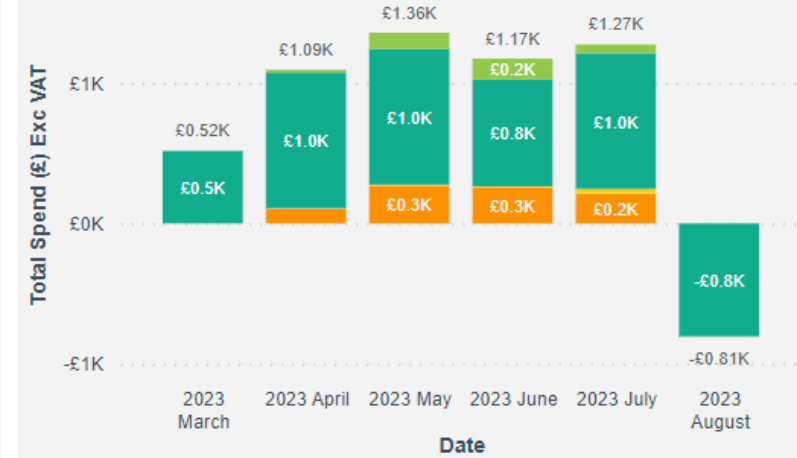
Weight by Waste Group (Tonnes)



Weight by Service Type (Tonnes)



Spend Group ● AT Waste ● HTI Waste ● Other ● Recyclables



Containers Emptied

CustomerName	Containers Emptied
Wrexham Maelor Hospital	563
Total	563

Service Weight Overview

Account Name	Weight (Tonnes)
Wrexham Maelor Hospital	1.45
Total	1.45

Service Cost Overview

Account Name	Total Spend (£) Exc VAT
Wrexham Maelor Hospital	£4,609.97
Total	£4,609.97



Trial progress log

Department Name	Provide a description of the challenge	How the Challenge was rectified	Date completed
Erddigg Ward	IPC think that S14 on drugs trolley is unsafe	Sharpsmart to fit 4 x plate and cradle	04/04/2023
Theatre 1 (Gastro)	Sister believes that having MR64 with used instruments in Theatre is a smell/ hygiene risk	Additional 64 Floorstand used for MR64 to be used outside of Theatre	24/03/2023
Labour Ward	Single-use metal are generated in MLU and Sluice	MR14 added to MLU room and MR64 to Sluice	24/03/2023
Erddigg Ward	Department is filling S14s quickly due to putting in bags & lines, there is only 1 S32 in Clean Utility. Sometimes several staff will be removing lvs	Additional S32 on CS1T placed in each of the 2 8 bed bays	04/04/2023
Theatre 4	Theatre Lead (Rachel) prefers MR64 to be kept outside of theatre due to space restrictions when using Accessmart	Floorstand provided so that MR64 used outside theatre	04/04/2023
Labour Ward	Hawen (sister) has reservations about using the system as blood can be visible on the safety tray	Reassurances given that: a) previous sharps containers would be the same b) when not in use, the temporary closure can be used c) If absolutely needed, safety tray can be wiped	04/04/2023
Erddigg Ward/ Simpson Ward/ Lawson Tait	S14 containers were filling very quickly due to IV bags and lines	IN64 containers have been set up in sluice room of each ward	19/05/2023
Theatres	Theatre B had clean and full containers stored in same place, staff thought that they had run out of clean containers when they were already there	Clean and full storage points have been separated	11/05/2023

Wrexham Maelor Trial Update

80 participants have responded to the evaluation survey.

*“Much better- more sustainable and less waste.
Happy that it's being recycled” Theatre Practitioner*

*“Before training it was difficult to close. A 'How to
Close' guide would be great laminated in each area
pls.” Scrub Nurse- Theatres*

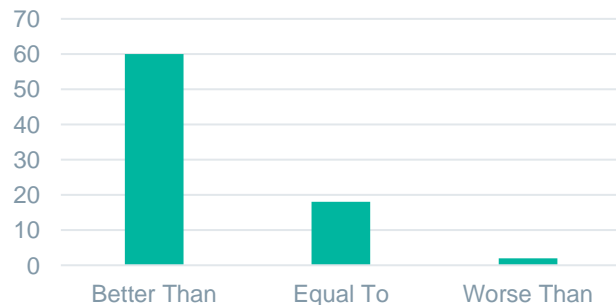
“Stronger more hard wearing than previous sharps boxes” Midwife- Blairbell

“Hope we get to keep them.” Lead Midwife MLU

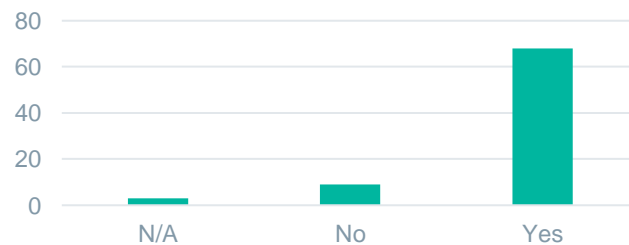
*“A GREAT IDEA TO COLLECT SHARPS WASTE, AND HOPEFULLY WILL BE
IMPLEMENTED AT THE WREXHAM MAELOR HOSPITAL IN THR NEAR
FUTURE” Porter*

*“Frees up storage required for plastic sharps (A plus for Health & Safety). Stick
injuries I feel would be reduced due to the “full” paddle closing automatically”
Housekeeper- Bonney*

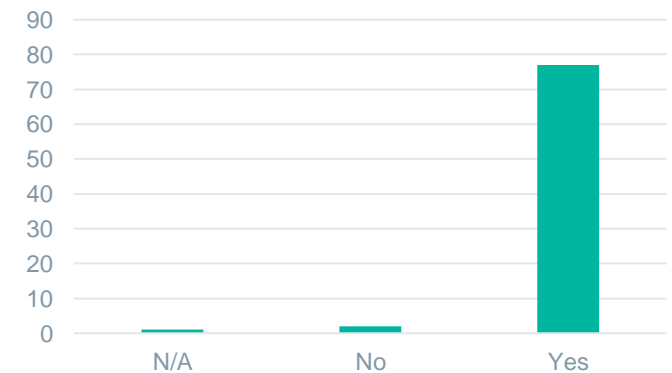
How does the Sharpsmart system compare to the previous system in regards to safety?



Has the introduction of the Sharpsmart system improved your knowledge of sustainability within NHS Wales?



Did you find the containers easy to use?



Department Type: 3. NHS Wales Operating Theatre Suites

CONTAINER & ACCESSORIES SHARPSMART DISPOSAL POINTS

Anaesthetic Room – 1 Per Room



Container Type: S32Y Medicinal Sharps

Accessory Type: Standard Floor Stand

Container Type:

Accessory Type:

Recovery Bays – 1 Per 4 Beds



Container Type: S32Y Medicinal Sharps

Accessory Type: Cartsmart1

Single Use Device Disposal – 1 Per Theatre



Container Type: MR64 Metal Recycling

Accessory Type: Accesmart Trolley

Theatre Suite – 1 Per Theatre



Container Type: S32Y Medicinal Sharps

Accessory Type: Accesmart Mountsmart

**CLEAN CONTAINER
STORAGE POINTS**

THEATRE A: STORES CUPBOARD
THEATRE B: CUPBOARD

**FULL CONTAINER
STORAGE POINTS**

THEATRE A: DISPOSAL HOLD
THEATRE B: RACKING IN CORRIDOR

Auditsmart Reports help continuous improvement

97.0%	Segregation		Action By
	Findings	Recommended Action	Trust
	Segregation good, but some containers contained gloves/soft clinical waste	Complement staff on great segregation, note exception.	

96.0%	Fill Optimisation		Action By
	Findings	Recommended Action	Trust
	All containers filled to optimum or near optimum level	Complement staff on filling containers appropriately	

80.0%	Waste Consignment Compliance (Locking & Labelling)		Action By
	Findings	Recommended Action	Trust
	Some containers were not locked and labelled accordingly	Advise staff of the importance of permanently locking and labelling the containers once full	

Each month, 10 containers are audited and scored on Segregation, Fill Optimization and Compliance

These audits, along with weekly/ fortnightly site visits have allowed the trial to follow a **continuous improvement plan**.

During the pilot **0.44 tonnes** of material was collected for metal recycling

Hospital	Dept	Audit Date	Open	Close	Audited SS Unit 6	Recycling
Wrexham	Th6	02/06/2023	21/03/2023	30/05/2023		
SS Model	Fill %	Waste Category	Segregation %			
MR64 Green	50	18.01.03/09	100			
Auditsmart Comments & Follow Up Actions						
Segregation	1. Segregation Excellent					
Fill Efficiency	1. No action required, staff should be complimented					
	2. Sharpsmart closed down prematurely by staff					
Labelling & Closure	2. Train staff on closure of Sharpsmarts to maximize volume					
	1. Units labelled, closed and locked in accordance with procedures					
	1. No action required, staff should be complimented					

Sharpsmart business overview

Sharpsmart clean processing facility:



Sharpsmart clinical & sharps waste processing:



- Patented Reusable Sharps Containment System / Safety Device
- 100+ hospital sites serviced (45 Trusts)
- 2,500+ non-acute sites serviced
- Circa 1m exchanges in the UK annually
- 3 'Clean' Sharpsmart Production Facilities
- 3 AT 'Waste Processing' Facilities
- 1 x Dedicated Patented Sharps Treatment (Disposal) System
- £21m investment programme

Our Treatment Infrastructure

	Rainham	Stoke	Normanton	Spennymoor
SERVICE CAPABILITIES:				
Clinical Waste Transfer Station	✓	✓	✓	✓
Clinical Waste Alternative Treatment (AT)	✓	✗	✓	Planning Approved, Permit Pending
Sharps Waste Treatment	✗	✓	✗	✗
Reusable Container Processing	✓	✓	✗	✓



Delivering Resilience And Innovation For Wales

Forecast Savings based on NWSSP data for 20-21 for all Wales Acute Hospitals

Account:	NHS WALES SHARED SERVICES PARTERSHIP	Date:	21/12/2021	0
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Current Hospital Sharps Management Dynamic Overview		
Bed Numbers	Avg. Burn Bin Cost per Bed / Annum	Incineration Costs £/Tonne
10,340	£161.48	£610.00

Current Service Dynamics Using Burn Bins (Annual Figures)	Values (Estimated Prior Year)
Burn Bin Numbers (per Annum)	562,454
Usable Volume (Litres)	3,953,095
Burn Bin Tonnage	480.74
Sharps Weight Tonnage	937.59
Total Waste Tonnage	1,418.33
Cost of Incineration	£865,183.23
Burn Bin Expenditure	£1,669,690.43
Total Current Cost of Sharps Management	£2,534,873.66
Lifecycle CO2e per Annum (Tonnes)	3,071.93
Needle Stick Injuries per Annum	1,530.32

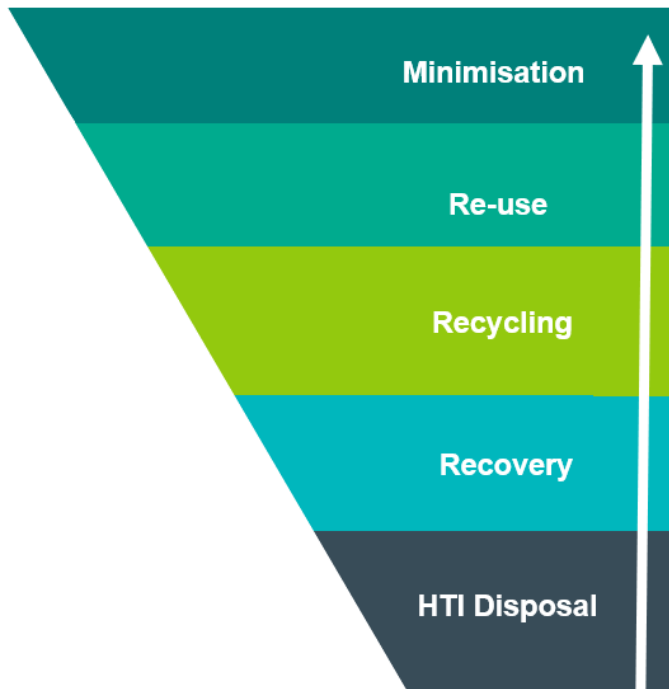
Sharpsmart Ltd Service	Value (First Year)	Sharpsmart Reductions	
Sharpsmart Unit Turns (Fig 1)	183,974	378,480	67%
Usable Volume (Litres)	3,953,095	0	0%
Burn Bin Tonnage	0	480.74	100%
Sharps Weight Tonnage	937.59	0	0%
Total Waste Tonnage	937.59	480.74	34%
Cost of Incineration (Fig 2)	£792,266.18	£72,917.05	8%
Sharpsmart Service Cost	£1,689,981.31	-£20,290.88	-1%
New Cost of Sharps Management	£2,482,247.50	£52,626.16	2%
Lifecycle CO2e per Annum (Tonnes)	337.48	2,734.45	89%
Needle Stick Injuries per Annum	1,117.13	413.19	27%

Highlights:

- NHS Wales currently buy and burn **480.74 tonnes of single-use plastic containers**
- Estimated 2734.45 tonnes CO2e to be saved through the switch to re-usables
- Estimated reduction of 413 needlestick injuries per year
- Estimated savings of 2% or £52,626 per year

Delivering on the NHS Wales Decarbonisation Strategy: BCUHB

	Initiative	Actions
45	<p><i>We will develop 'plastics in healthcare' initiatives to address waste in the delivery of health care - this will aim to tackle PPE, single use plastics, and packaging waste.</i></p>	<p><i>Consult industry partners, clinicians, recycling experts and literature to develop initiatives to reduce the use of single-use plastics in healthcare where possible and increase the potential for recycling and reuse. Ideally, this will be partially addressed through a shift in procurement practices where feasible, as outlined in initiatives 26-30.</i></p>



- ✓ Eliminating the annual consumption of 44 tonnes of single-use containers
- ✓ 82,208 disposable containers per year replaced by reusable containers
- ✓ Recycling 2.8 tonnes of single-use instruments in MR containers (2% of total)
- ✓ Medicinally contaminated sharps all process through energy recovery
- ✓ Pharmaceutical and cytotoxic waste streams only

THANK YOU

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Closed loop 'R-code' Sharps Treatment Process

