

Carbon dioxide emissions attributable to the NHS in England are greater than the annual emissions from all aircraft departing from Heathrow Airport.




Improvement
for our patients, people and planet

Improvement to T34 Syringe Drivers



SaTH
Improvement Hub



Improvement to delivery of T-34 syringe drivers

- Kev Malton – seconded to Medical Devices from Portering services
- Problem: Delay in providing T-34 Syringe pumps to EOL patients out of hours
- Identified following audit by Kev
- Data showed that delays caused due to prioritization of teletracking
 - Solution: Link in with stakeholders and update priority on system
 - Result: Reduced from hours to between 5 and ten mins
 - Now all EOL patients receive analgesia in their final hours with us



Improvement to tracking of T-34 syringe drivers

- Problem: Following audit, identified that loan forms were not being completed when delivered out of hours, resulting in misplacing, or losing pumps.
- Resulted in only having between 4 and 6 in stock
- Each unit costs £1500, with lost pumps having to be replaced to maintain appropriate stock
- Kev realised the problem and worked with End-of-Life team to update process

NHS
The Shrewsbury and Telford Hospital
NHS Trust

Loan Agreement Form For T34 Syringe Pump
All Wards Mon-Fri 08:30-16:00

Patient NHS Number	
Accepting Ward & Phone Number	
Accepting Nurse Name	
Accepting Nurse Signature	
Equipment Number	
MES Staff Signature	
Date of Loan	

Please Return the T34 Pump to:

<input type="checkbox"/>	<input type="checkbox"/>
Medical Engineering Royal Shrewsbury Hospital Mytton Oak Road Shrewsbury SY3 8XQ Telephone: 01743-261149	Medical Engineering Princess Royal Hospital Apley Castle Telford TF1 6TF Telephone: 01952-641222 EXT 4260

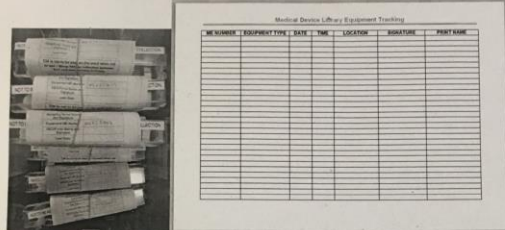
Improvement to tracking of T-34 syringe drivers

Solution

- Provide two copies of form attached to pump
- One copy pre-populated and porter requests a signature to take back to med devices as a form of receipt
- Second copy acts as reminder of the process to the Ward on how to return the pump
- Ward now bleeps Kev, or whoever covers device library to collect when complete
 - It is important that they are not used for other patients and therefore, need to be returned when no longer needed by the patient it was issued for
- Kev attended porter huddles and linked in with Ward managers to share new process
- He now has 16 pumps in stock and reduced the defect rate significantly

Issuing a T34 Syringe Pump

Pick up T34 from Medical Device Library. Each T34 will have two copies of the T34 Loan Agreement Form, which will have the ME number already completed.



Complete the Equipment Tracking Form along with the patient details the Loan Agreement otherwise asks the accepting nurse to place a patient label on the Medical Device Library Copy.

Medical Device Library Copy - Place in Chargehand Office

Loan Agreement Form for T34 Syringe Pump

Patient Label or Initials and ME Number	
Accepting Nurse Name and Signature	
Equipment ME Number	
MESOP/Porter Name and Signature	
Loan Date	

T34 is not to be kept on the ward when not in use - Bleep 884 for collection between 8am and 4pm Monday to Friday

This T34 is the property of the Medical Device Library at Royal Shrewsbury Hospital which will not be liable for any costs, claims, damage or injury resulting from the misuse of the equipment and reserves the right to chase charge the accepting ward for any avoidable damage or loss of equipment whilst in their possession.

Loss of Syringe Pump would result in a bill totalling approximately £1,500 per unit.

Ward Copy

Loan Agreement Form for T34 Syringe Pump

Patient Label or Initials and ME Number	N/A
Accepting Nurse Name and Signature	N/A
Equipment ME Number	N/A
MESOP/Porter Name and Signature	N/A
Loan Date	N/A

T34 is not to be kept on the ward when not in use - Bleep 884 for collection between 8am and 4pm Monday to Friday

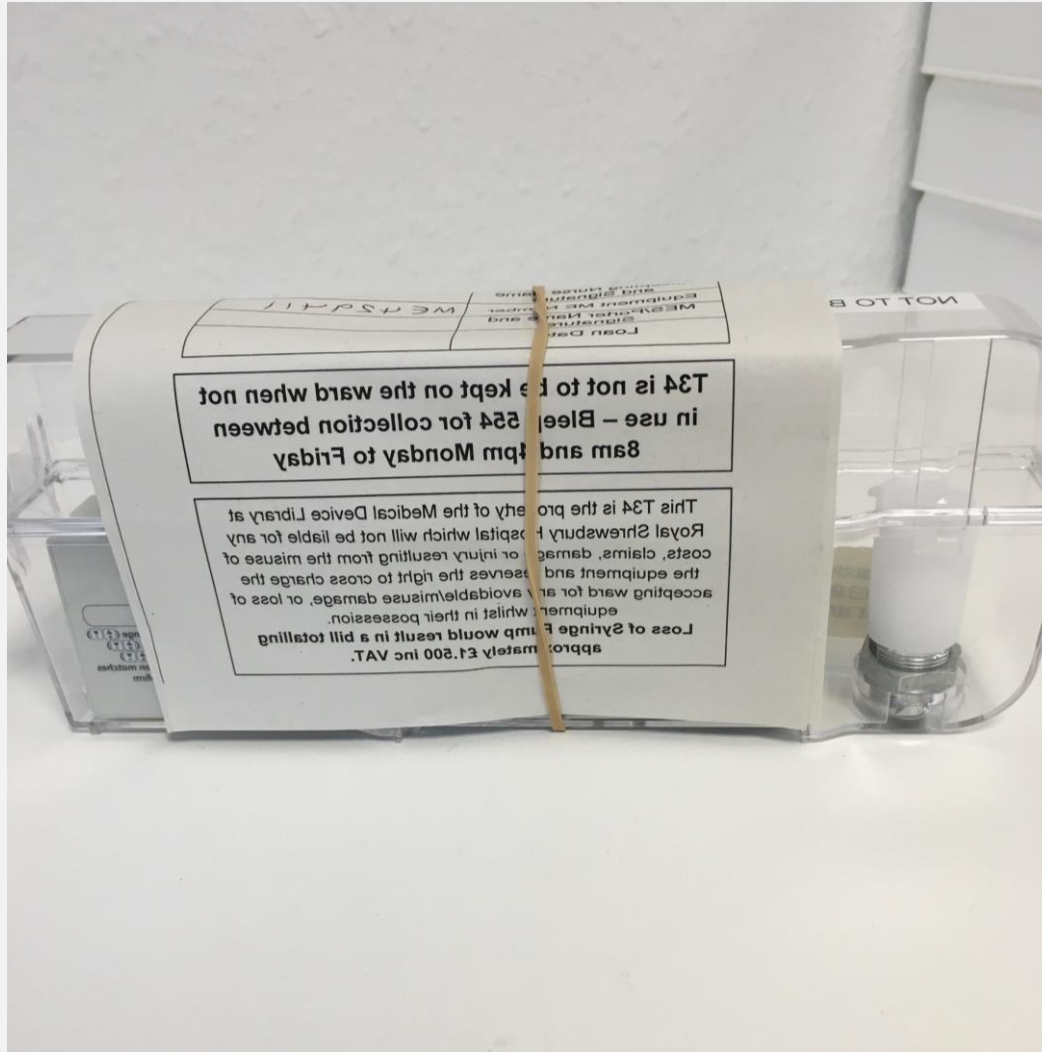
This T34 is the property of the Medical Device Library at Royal Shrewsbury Hospital which will not be liable for any costs, claims, damage or injury resulting from the misuse of the equipment and reserves the right to chase charge the accepting ward for any avoidable damage or loss of equipment whilst in their possession.

Loss of Syringe Pump would result in a bill totalling approximately £1,500 per unit.

Once on ward ask the accepting nurse to place a patient label on the Medical Device Library Copy, if required and to sign the loan agreement.

Hand the Ward Copy and the T34 over, and then return the completed Medical Device Copy to the Chargehand office, ready for collection.

Visual controls with forms attached



Improvement to issuing and returning of T-34 Syringe pumps

Kev Malton (EBME), Ian Morris-Jones, Jon Ashcroft, Debbie Snooke

Abstract:

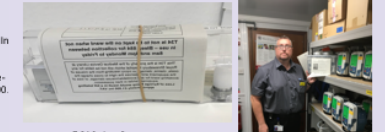
It had been identified that delivery of T-34 Syringe pumps, used to provide analgesia for our end-of-life patients, were taking too long to be delivered out of hours, sometimes resulting in not being received in time to provide the care needed. Additionally, it had been identified that compliance in returning the pumps was extremely poor, resulting in lost, or unaccounted for pumps. This in turn resulted in additional costs in the region of £1500 per unit for Wards that had misplaced them. Following a series of improvements, including re-prioritising the Teletracking process, and updating the loans/returns process, a significant improvement was seen. Rather than taking hours to deliver the pumps, this has been reduced to approximately 5 minutes, and now all pumps on loan are returned, which has resulted in cost efficiency as well as increasing the stock held in Medical Devices from 6 to 16.

SMART Aim

The aim of the project was to ensure all patients who are end of life receive their analgesia via a T-34 Syringe pumps by the end of August 2022. Additionally, a secondary aim was to increase the stock levels of T-34 pumps in Medical Devices by the end of August 2022.

Plan

Following an audit, it was identified that significant delays were being seen in the delivery of T-34 syringe pumps for our end-of-life patients. In some circumstances, pumps did not arrive in time to benefit a patient's final hours. Additionally, it was identified that there were many unaccounted syringe drivers, resulting in having to cross-charge and re-order additional resources. The cost of a pump is in the region of £1500. For both concerns, it was further noted that it was a problem predominately during out of hours and therefore, this was the focus for improvement.



T-34 Syringe Pump

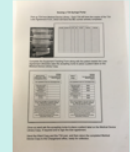
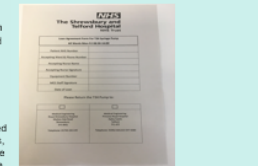
Kev Malton in Medical Devices Library

Do

To solve the delays in delivering pumps out of hours, Kev linked in with the Porter, Medical Devices and End of Life teams to agree an appropriate prioritisation on the Teletracking system. In doing so, he ensured this did not impact on delivery of other essential equipment as an unintended consequence.

To overcome the compliance of the pump returns, he re-designed the loans process as follows:

- Each T-34 pump has two copies of the updated loan form attached, which will have the ME number already completed
- On delivery of the pump, the ward copy of the loans form remains on the ward and the completed copy for the Medical Device Library is kept by the delivery person. During normal working hours, this is then returned and updated on the tracker immediately. Out of hours, the porter returns the form to the Chargehands office, which is then collected the following morning by the Med Device Library staff, who then updates the tracker one of the forms is completed and signed for by the receiving nurse, including putting on a patient sticker, and taken back to Medical Devices
- To return the pump, the ward can bleep 554 to make collection arrangements with whoever is covering the Medical Device library, otherwise, the pump is left in a designated area on the ward to be picked up during the general equipment collection run
- On occasion, the T-34 pump needs to be transferred to a Hospice, or Community nursing team with the patient. Under these circumstances, the external loan agreement, which can be found in the end-of-life resource pack, needs to be completed. Three copies are made, with one attached to the patients discharge letter, one in the patient notes and the other sent to the Med device library, which enables them to be tracked.



To ensure all wards were aware, Kev attended porter huddles and briefed Ward Managers.

Study

Following re-prioritisation on Teletracking, it has been noted that all patients who require T-34 syringe pumps now receive them in a timely manner. The data shows that this has improved from hours to 5 minutes during the day and between 5 and 10 mins out of hours. As a result, all patients now receive the analgesia they need in their final hours with us.

Following the introduction of the new loans process, all syringe pumps are now returned in a timely manner and no pumps have gone missing. This potentially has saved in the region of £10,000 by not having to re-order new pumps to retain a stock of 16.

Act

The improvements made has made a significant difference to our end-of-life patients, as well as ensuring pumps no longer go missing. To ensure this process is sustained, the process will continue to be communicated to the wards, and Medical Devices will continue to audit to demonstrate the process is being followed and having the impact it needs.