

McKinley T34 Syringe Pump Policy



Title:

McKinley T34 Syringe Pump Policy

To support the care of patients requiring a continuous subcutaneous infusion of medication for palliative care via CME McKinley T34 Ambulatory Syringe Pump

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Author/s:	Lothian McKinley T34 Group		
Executive Lead:	Executive Medical Director, NHS Lothian		
Target Audience:	Registered nurses, pharmacy, medical staff, medical physics, procurement, service managers, palliative care		
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Version Control

Date	Author	Version/Page	Reason for change
Jan 2014	Lothian McKinley T34 Working Group	1.b	Revision of content. No changes required.
Oct 2016	Lothian McKinley T34 Working Group	1.c	Revision of wording to Key Requirements & Responsibilities in areas of infrequent use; Scottish Palliative Care Guidelines publication
April 2017 – March 2018	Lothian McKinley T34 Working Group	2	Revision of wording to apply to Adult, Children & Young Peoples Services; Clarification re roles & responsibilities in areas where pumps used infrequently; Education requirements for staff in line with Scottish Government (2017) Palliative & End of Life Care Enriching & Improving Experience Education Framework; Updated Manufacturers Operating Manual Nov 2016 100-090SM Rev.02; Safety Alerts & Field Safety Notices incl. FSN2016-004, IA211-19820; MDA -2018-010; Additional procedural and process changes following audit & evaluation as detailed in CPDIG submission supporting information.

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Executive Summary

The CME McKinley T34 Syringe Pump policy aims to support safe and effective symptom management in hospital, community, and hospice settings. This has been developed by a working group from across settings and disciplines and reflects clinical evaluation, current guidelines, safety and manufacturers standards, expert consensus and feedback from staff, patients and carers.

The policy details information regarding the use of the CME McKinley T34 Syringe Pump in practice, including context, processes for clinical management, the responsibilities of departments and specific roles including Heads of Service, managers and clinicians, and the education requirement for clinical staff. It is essential that clinical staff using the CME McKinley T34 Syringe pump are competent to do so and supported through clear local processes for operation and risk management and have access to guidance regarding use of the pump and symptom management. This policy accompanies the detailed procedural clinical guidelines for staff regarding how to set up and operate the CME McKinley T34 syringe pump *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, version 2: 2018-2021.

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1.0 Purpose

To ensure the delivery of safe, effective and person-centred care for patients requiring a continuous subcutaneous infusion of medication via CME McKinley T34 Ambulatory Syringe Pump in Lothian. This policy aims to:

- Support consistent, evidence-based practice regarding the administration of continuous subcutaneous infusions of medication via CME McKinley T34 Syringe Pump for palliative care across care settings.
- Outline the roles and responsibilities of clinical staff, managers, support staff and services.
- Identify the education requirements for clinical staff.
- Identify a route for communication regarding the reporting of risk, adverse events and near misses involving the CME McKinley T34, and for sharing learning across hospital, community and hospice settings to support continuous quality improvement.

2.0 Policy statement

The use of a battery-operated, portable syringe pump to administer a continuous subcutaneous infusion of medications is established practice in palliative care. When patients cannot swallow or absorb oral medications, the syringe pump provides an alternative method of controlling distressing symptoms.

Syringe pumps may be used throughout the palliative phase of a life-limiting illness and for short or extended periods. Up to three medications may be given within a single syringe and infusion. Continuous subcutaneous delivery achieves stable plasma levels of medication. The prescription can be reviewed and adjusted daily in assessing the patient's symptoms and response, any requirement for PRN medications and any side effects. This means the syringe pump is more flexible when managing unstable symptoms and in titrating analgesia than patch and transdermal routes of drug administration. The utility and portability of the CME T34 syringe pump means this device is used within all care settings and can stay with the patient on transfer or discharge.

As is the case with any medical device, the use of the syringe pump is not however without clinical risk. To ensure patient safety and address governance requirements, the model of syringe pump should meet current standards for infusion devices. Furthermore, as operator error is the main cause of adverse events involving medical devices, guidance and training for healthcare professionals is essential.

Clinical use of the CME McKinley T34, infusion equipment and procedures to be followed when caring for a patient are detailed within the *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, version 2: 2018-2021 which should be read with this policy.

3.0 Scope

This policy applies to all healthcare professionals caring for adults, children and young people requiring a continuous subcutaneous infusion of medication via CME McKinley T34 Syringe Pump for palliative care within;

- NHS Lothian acute hospitals
- Hospital Based Complex Care (HBCCC)
- Patients own homes
- Care homes
- Community Hospitals
- RHSC Continuing Care Service Sunndach and Calareidh
- St. Columba's Hospice
- Marie Curie Hospice Edinburgh

In Lothian our CME McKinley T34 pumps are specifically configured for palliative care delivery. This policy does not cover the use of the CME McKinley T34 for other purposes and any service considering this should contact Medical Physics for advice. A local risk assessment is required and separate policy and guideline development may be needed.

4.0 Definitions

Palliative care aims to prevent and relieve pain and suffering throughout any serious illness as well as where death is impending, and in bereavement. The focus is holistic and person-centred care that enables people to live well, and when death is inevitable, to die peacefully and with dignity. Care and support for people who are dying extends to family and important others.

End of life care refers to care in the last days of life, when death is expected.

CME this abbreviation identifies the manufacturer of this device.

5.0 Implementation roles and responsibilities

5.1 Heads of Service/Service Managers

Heads of Service / Service Managers should ensure that;

1. Department clinical staff that may care for a patient requiring a CME McKinley T34 Syringe Pump for Palliative care complete education.
2. Clinical staff can access the *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, v 2: 2018-2021 and the *Scottish Palliative Care Guidelines*.
<http://www.palliativecareguidelines.scot.nhs.uk>
3. An inventory is maintained of any CME T34 Syringe pumps allocated to their area and a process is in place to facilitate return of a pump which has been loaned out with or transferred with a patient to another care setting. Replacement of lost pumps is the responsibility of the service area.

4. In areas where T34 syringe pumps are not used routinely, a local process is defined for managing the situation where a patient may require this. This includes a risk assessment; defined roles and responsibilities particularly where there are different teams or services involved; and the procedure for troubleshooting and escalation of any issues. This is particularly important where staff in an area looking after the patient do not set up or replenish the infusion and this is completed by a visiting service. See 5.2 below.

5.2 Charge Nurses/Team Managers

Charge Nurses / Team Managers should ensure that;

1. Clinical staff that may be required to care for a patient requiring a continuous subcutaneous infusion for palliative care via CME McKinley T34 syringe pump;
 - Know how to access the *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, v 2: 2017-2020.
 - Know how to access the *Scottish Palliative Care Guidelines Syringe Pump and symptom management guidelines*.
 - Know how to obtain advice from pharmacy and specialist palliative care services in and out with normal working hours.
 - Have successfully completed education to achieve and maintain competence as defined within the Lothian CME McKinley T34 and infusion device training materials.
2. Up-to-date records of staff training are kept.
3. An accurate record is kept of any CME McKinley T34 Syringe Pumps allocated to the area and that pumps are returned to medical physics department for servicing on an annual basis.
4. Staff follow the *Process for Managing the Inventory and Movement of McKinley T34 Syringe Pumps* to ensure the return of a pump transferred with a patient to another care setting.
5. All staff are aware of what to do in situations where a visiting registered nurse sets up or replenishes an infusion via CME McKinley T34 syringe pump in a care setting/ unit where the staff have not been trained to do this. The visiting nurse and the nurse in charge must agree arrangements for scheduled daily replenishment. The visiting nurse must ensure that the nurse in charge is familiar with the procedure to be followed to monitor the device and in the event of a problem e.g. device alarm, malfunction, patient distress, and that the unit has the necessary contact numbers for support out of hours and in hours should this be needed. Within NHS Lothian settings the nurse in charge should ensure regular monitoring of the device as per *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, v 2: 2017-2020. . There should also be anticipatory medication available for the staff to administer in the event of the syringe pump not working or needing to be switched off. The nurse in charge of the unit must ensure this information is shared with the ward team and this information is included in ward handovers.

5.3 Clinical Staff

Clinical Staff caring for patients requiring a continuous subcutaneous infusion of medication via the CME McKinley T34 Syringe Pump must ensure that they;

1. Are competent in the operation of the CME McKinley T34 syringe pump and its use for palliative care on an individual patient basis.
2. Seek support from their Line Manager to achieve and maintain competence and complete any educational activities necessary for this.
3. Keep a record of education activities completed as part of the Personal Development Planning and Review Process.
4. Can demonstrate knowledge and application of the *Subcutaneous Infusion by McKinley T34 Syringe Pump for Symptom Control in Palliative Care Guidelines*, v 2: 2018-2021.
5. Provide appropriate information and support to enable the patient and important others as appropriate, to participate in decision-making and care, to the extent they wish and are able to. This includes use of the CME McKinley T34 Syringe Pump Information Leaflet.
6. Are aware of how to access the *Scottish Palliative Care Guidelines* and local sources of help and information including medical physics, pharmacy and specialist palliative care services in and out with normal working hours.
7. Maintain up to date knowledge of the medications prescribed in the context of symptom management; drug effects and side effects; combining medications in the same syringe/ with same diluent; that the prescription is appropriate to the individual patient.
8. Follow the Lothian/ Hospice adverse event reporting and risk management procedures. This includes completing the McKinley T34 Syringe Pump Adverse Event Reporting Summary Information Fields on datix (hard copy hospices) and *McKinley T34 Service Request Form* for pumps returned to Medical Physics due to malfunction or adverse event.

5.4 NHS Lothian Medical Physics Department

Scientific and technical support for the use and care for the CME McKinley T34 syringe pumps in Lothian will be provided by the NHS Lothian Departments of Medical Physics, which will;

1. Maintain asset and maintenance registers of the CME McKinley T34 syringe pumps.
2. Agree with the clinical leads the configuration of the CME McKinley T34 syringe pumps and arrange for and configure the pumps to meet the agreed configuration.
3. Provide and organise the scheduled inspection and breakdown maintenance of the CME McKinley T34 syringe pumps in Lothian. This includes within the terms of the Service Level Agreement with St Columba's Hospice and Marie Curie Hospice, Edinburgh.
4. Support safe and effective patient care through the overall management of the CME McKinley syringe pumps and the accessories and consumable equipment used with the pumps.

5. Lead and support the purchase, implementation and use of pumps required to deliver palliative care in Lothian. This includes the development of business plans for submission to the Lothian Medical Equipment Review Group.

5.5 Education and training for staff

All staff using the McKinley T34 syringe pump are accountable for their practice in the use and operation of such devices.

Registered nurses should ensure compliance with the Nursing and Midwifery Council (2015) Code and Standards for Medicines Management. This includes actively seeking support from their line managers where required and completing appropriate educational activity to achieve and maintain competence.

Qualifications required	Registered nurses – current registration with the Nursing & Midwifery Council (NMC).
Additional requirements	Has completed competency based training on T34 syringe pump management for patients requiring palliative care.
Continuing education requirements	Achievement and maintenance of competency should be reviewed by the Registered Nurse and with their line manager during Personal Development Planning & Review. Maintaining knowledge and skills is a professional requirement of the postholder.

6.0 Associated materials

Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines, v 2: 2018-2021

Scottish Palliative Care Guidelines <http://www.palliativecareguidelines.scot.nhs.uk>

7.0 Evidence base

This policy and the Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines, version 2: 2017-2020 have been developed by a working group with representation from hospital, hospice and community settings in Lothian (appendix I). The content reflects a review of evidence, clinical evaluation [including analysis of incidents, clinical audit, staff feedback questionnaire, process review of access and use of the CME T34 syringe pump within hospital, community and hospice settings, interviews with patients and carers and consultation with professional organisations e.g. Royal College of Nursing], other relevant local policies and expert consensus.

7.1 Supporting references

CME McKinley (2016) *T34 Syringe Pump System Operator Manual* 100-090SM Rev.02 Nov 16

Medicines Healthcare Products Regulatory Agency (2013) *Infusion Systems*. Medicines and Healthcare products Regulatory Agency: London

Medicines Healthcare Products Regulatory Agency (2015) *Managing Medical Devices: Guidance for Healthcare and Social Services Organisations*

National Patient Safety Agency (2010) *Safer Ambulatory Syringe Drivers* Ref: NPSA/2010/RRR019

NHS Education for Scotland (2010) *Guidelines for Use of the CME McKinley T34 Syringe Pump for Adults in Palliative Care*

NHS Purchasing and Supply Agency (2008) *Ambulatory Syringe Drivers: Buyers Guide* CEP 08046

NHS Scotland (2018) *Scottish Palliative Care Guidelines*
<http://www.palliativecareguidelines.scot.nhs.uk/>

Nursing and Midwifery Council (2015) *Standards for Medicines Management*

Nursing and Midwifery Council (2015) *The Code: Professionals Standards of Practice and Behaviour for Nurses and Midwives*, London.

8.0 Stakeholder engagement

There has been wide consultation and evaluation which is available on request.

This includes: staff questionnaire, patient and carer interviews, analysis of Datix and hospice adverse events, links with other board areas and with Healthcare Improvement Scotland Scottish Palliative Care Guidelines Group, clinical audit and two rounds of consultation via e mail with professional stakeholders and groups including the Lothian Medical Devices Committee. The Lothian McKinley T34 Working Group was made up of a number of key stakeholders, including:

- Head of Medical Equipment Management, NHSL
- Lead Nurse Palliative Care, NHSL
- Servicing Manager, Medical Physics, NHSL
- Nurse Consultant, Cancer and Palliative Care, Lothian CHCPs
- Clinical Procurement Manager, NHSL
- Deputy Clinical Procurement Manager, NHSL
- Senior Pharmacist-Palliative Care, NHSL
- Palliative Care Nurse Specialist, Children & Young Adult Services, RHSC
- Senior Charge Nurse, Oncology, WGH, NHSL
- Clinical Effectiveness Facilitator, NHSL
- Quality & Safety Assurance Manager, NHSL
- Advanced Practitioner Clinical Education, NHSL

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- In-patient Unit Manager, St Columba's Hospice
 - Service & Staff Development, St Columba's Hospice
 - Staff Nurse, Marie Curie, Edinburgh
 - Patient Services Clerk, Marie Cure, Edinburgh
 - Clinical Nurse Manager, Edinburgh H&SCP

9.0 Monitoring and review

- Local policies for risk management, reporting and medicines should be followed: NHS Lothian, St Columba's and Marie Curie Edinburgh Hospices.
- The responsibility for local implementation of this policy and the *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines*, v 2: 2018-2021 is at service level. This includes taking appropriate action to address local risk and support ongoing quality improvement.
- On a pan-Lothian basis, the Lothian McKinley T34 Group will collate and review adverse events annually to inform pan-Lothian development.
- Complaints relating to continuous subcutaneous infusions via CME McKinley T34 syringe pump will be monitored through the NHS Lothian and Hospice Complaints Procedure and reviewed bi-annually by the McKinley T34 group.
- Staff completion of education required for competence will be monitored locally as part of the Personal Development Planning and Review Process.
- This policy along with the *Subcutaneous Infusion by CME McKinley T34 Ambulatory Syringe Pump for Symptom Control in Palliative Care Guidelines* v 2: 2018-2021 will be reviewed every 3 years by the Lothian McKinley T34 Group