

Policies, Procedures and Guidelines

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| 2 | 17/04/12 | Amended to include paediatrics |
| 3 | 16/02/2016 | Updated |
| 4 | February 2018 | Reviewed and updated |
| 5 | | |

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1 Introduction

This policy has been developed in response to the recommendations from the National Patient Safety Agency (NPSA RRR019 2012), that organisations develop a purchasing for safety initiative with regards to ambulatory syringe drivers.

The McKinley T34 syringe pump meets Medicines & Healthcare Products Regulatory Agency (MHRA) safety recommendations for syringe pumps that reduce risk of errors and tampering. The McKinley T34 operates in millilitres (ml) per hour, has an events log and a lockable keypad and box.

This policy **MUST** be used alongside full compliance with the Trust McKinley T34 syringe pump Resource Packs.

2 Purpose

This policy has been produced to assist and support professionals in the safe administration of medication via the McKinley T34 syringe pump and promote standardised practice within Shropshire Community Health NHS Trust.

Adults - Syringe pumps are used for the safe administration of medication into the subcutaneous tissue over a continuous 24 hour period. In exceptional circumstances a shorter infusion may be required but this will be consultant led.

Children - syringe pumps are used for the safe administration of medication into the subcutaneous tissue or the intravenous route via a central venous line (CVL) over a continuous 24 hour period.

The use of syringe pumps can enhance patient comfort and quality of life, managing their symptoms effectively enabling patients to remain within a community setting.

3 Definitions

The McKinley T34 Syringe Pump is a portable battery operated device which delivers a continuous subcutaneous infusion (CSI) of prescribed drug(s) over a fixed period of time generally 24 hours, that complies with all current safety standards.

The McKinley T34 Syringe Pump Resource Packs – contain best practice guidelines and resources when setting up and using the McKinley T34 with adults and children in the community.

West Midlands Children and Young People's Palliative Care Toolkit (2011) – it contains best practice guidelines for palliative care of children and young people to deliver care in line with the Together for Short Lives care pathways.

Community Children's Nursing Team (CCNT)

4 Duties

4.1 Managing Director and Deputy Directors

Directors of Services are responsible for ensuring the safe and effective delivery of services they manage; this includes securing and directing resources to support the implementation of this policy.

Must ensure that:

- All staff are to have access to this evidence based policy document
- To ensure that appropriate training and updates are provided to all relevant staff groups
- Staff are to be made aware of any policy changes and new skills update followed by the appropriate training

- All relevant staff have access to appropriate equipment that complies with safety and maintenance requirements according to Shropshire Community NHS Trust Policy (SCHT).

4.2 Line Managers and Service Leads

Managers will ensure that a system is in place within the services they are responsible for, for the implementation of this policy and for monitoring its effectiveness.

4.3 Community Service Managers and Team Leaders

Individual line managers are responsible for informing staff of this change of policy and any associated policies, guidelines and documents and that the appropriate education, supervision, and mechanisms are in place to ensure safe practice. Any training requirements must be raised and addressed via appraisal or supervision and a record of competencies kept for audit purposes.

4.4 Staff

This policy applies to all nurses employed by Shropshire Community Health NHS Trust involved in the care and management of patients with a syringe pump in community settings

They must ensure they work within this policy and associated policies and guidelines. Complete associated self-assessment of competencies which will include McKinley online training annually and face to face training and lock on competencies three yearly or sooner if deemed clinically appropriate.

5. Use of the McKinley T34 – Refer to Resource Pack February 2018

5.1 Safe Use Guidance

The McKinley T34 should be used with the lockable box supplied wherever possible; each staff member will have responsibility for their own individual key and must ensure they have the key with them to unlock the box when visiting the patient in order to access the pump. **Keys must not be left in the patient's residence.**

Syringe Pumps must be cleaned with detergent wipes and kept out of direct sun light in an individual single patient use syringe pump carrier.

5.2 Indications for use of a syringe pump

The decision to administer medication via a syringe pump needs to be taken by the prescriber in consultation with the multidisciplinary team and the patient/carers. It is important to consider that it will take some time for the prescribed medication to reach therapeutic levels, therefore a bolus dose will need to be considered (Twycross 2002) as part of the initial set up process.

5.3 Infusion times

The syringe pump is used to deliver drugs at a predetermined rate over a 24 hour period in mls per hour the pumps are set at a default of 24 hours (lock on).

Adults – in rare cases if the decision is made to use an alternative regime this must be set up by Medical Engineering who are based on the Shrewsbury and Telford Hospital (Shrewsbury site) (SATH) who are aware of the labelling and tracking of the altered pump.

5.4 Authorisation and administration of Palliative Care Medicines

Practitioners must check that medications have been legally prescribed by a qualified prescribing practitioner before administration. Community Nurses may never see the FP10 prescription as it will be processed by the pharmacy. The label on the medicine indicates there was a legal FP10. Medications including controlled drugs will only be

supplied for the patient following a legal prescription. Nurses will require up to date information on the doses via a current authority to administer (Patient Specific Direction).

Adults nurses must ensure they have written authorisation via a Patient Specific Direction to commence treatment.

Children's nurses must ensure they have the drug administration document completed from the West Midlands Children and Young People's Palliative Care tool kit.

5.5 Verbal orders to administer drugs

Adults and Children -Signed copies of a Patient specific direction sent via fax/email may be accepted but the fax/email copy must be retained within the client held records (see Medicines Policies in particular Policy Part 1 Section 8). The Trust's preferred method is via email and from January 2019 no fax will be accepted. The original authorisation that has been faxed or emailed must be received by the service at the earliest opportunity (no more than 72 hours) over weekends and bank holidays.

NMC Standards for MEDICINES Management specifically say:

Standard 11: Remote prescription or direction to administer

1 In exceptional circumstances, where medication (not including controlled drugs) has been previously prescribed and the prescriber is unable to issue a new prescription, but where changes to the dose are considered necessary, the use of information technology (such as fax, text message or email) may be used but must confirm any change to the original prescription.

A verbal order is not acceptable on its own. The fax or email prescription or direction to administer must be stapled to the patient's existing medication chart. This should be followed up by a new prescription signed by the prescriber who sent the fax or email confirming the changes within normally a maximum of 24 hours (72 hours maximum – bank holidays and weekends). In any event, the changes must have been authorised (via text, email or fax) by a registered prescriber before the new dosage is administered. The registered nurse should request the prescriber to confirm and sign changes on the patient's individual medicines administration record (MAR) chart or care plan.

5.6 Anticipatory prescribing of drugs

It is considered good practice to implement anticipatory prescribing for palliative care patients. This includes prescribing as required (PRN) doses for symptom control at the same time as the daily dose. This enables the nurse to administer the medication (as long as there is a current authority to administer in place) without delay and reduce distress for the patient and or carers/families. Any anticipatory palliative care drugs prescribed should be recorded within the client held documentation. The provision of palliative care drugs should also be identified on a flagging notice to Shropdoc.

5.7 Existing oral and transdermal medications

Practitioners must ensure that all oral and/or transdermal medications given in the previous 24hours are taken into consideration and required conversions (i.e. oral Morphine to Diamorphine) reflected in the prescription for the syringe pump medications. A conversion guide is available in the BNF **Remember**, any transdermal medication should remain in place when the syringe pump is commenced barring exceptional circumstances and will continue to be used as prescribed.

5.8 Support and advice

If practitioners require support or advice in managing symptoms or if there are any concerns regarding the dose, side effects, or the appropriateness of the prescription, the practitioner must liaise with either the prescriber, GP, specialist palliative care team, out

of hours doctor, hospice, pharmacist or Medicines Management team **before** administering the medication.

5.9 Re-stocking palliative care medication

The Practitioner who uses the medication from the Palliative Care Medicines supplied is accountable for ensuring that replacement prescriptions are issued and delivered to the patient so that symptoms can be managed promptly and the patient's needs are safeguarded on a continuous basis. The practitioner needs to ensure that the drug balance record is updated to document when new stocks of medication are available in the patient's home. Additionally the drug stock balance forms must be completed on each visit for any patient that the community team are involved with whom has just in case drugs and in use palliative care medication. This safeguards the position of the nurse when handling the patient's own drugs, especially controlled drugs.

5.10 Transportation of Drugs

The medicines will either be collected by a patient representative or delivered by the pharmacy. The community nurse should only transport controlled drugs when all other means of obtaining the medication have been exhausted. In the rare case where community nurses need to transport controlled drugs the line manager/on call manager must be informed. (See Standard Operating Procedure for controlled drugs – DN003)

5.11 Return of Palliative Care Drugs no longer required

It is the responsibility of the patient's representative (family member/carer/friend) to ensure that all Palliative Care Drugs in the patient's home that are no longer required are returned to the pharmacy. The community nurse will record in the patient held record what advice/ information on the disposal of medication has been given to the patient's representative. (As above see DN003). Only in exceptional circumstances should a practitioner remove prescribed medication and the line manager/on call manager must be informed with relevant risk assessment undertaken and justification documented. This is to safeguard the position of the nurse when taking possession of controlled drugs for the purposes of transporting them to a healthcare professional who is authorised to dispose of them (ie community pharmacist). The nurse should ensure she/he obtains a signed receipt from the community pharmacy for the return of controlled drugs.

5.12 Record keeping of medication administered via syringe pump

A clear, accurate and contemporaneous record of all medication administered Nursing and Midwifery Council (NMC 2010 and NMC 2015) must be entered into the appropriate medication administration records within the patient's notes. The practitioner who administers the medications must ensure that their name, signature and designation are clearly recorded

5.13 Monitoring the infusion

Practitioners should use their professional judgment to decide frequency of monitoring and visits – this will be at least every 24 hours.

They must clearly document on the syringe pump monitoring record at each patient visit including observations of the infusion device and the patient's condition in terms of symptom control as per guidance in the Trust's McKinley T34 Syringe Pump Resource pack 2018.

5.14 Patient Information

Practitioners should explain to the patient/carer how the McKinley T34 syringe pump works and why it is the preferred method of drug administration. Practitioners should also ensure that the patient/carer is aware of syringe pump alerts/alarms and how to contact the most appropriate health service provider if the syringe pump is not functioning

properly. The patient/carer must be provided with telephone numbers for reporting problems as listed below over a 24 hour period:

- light changes from green to red
- alert/alarm sounds
- needle becomes dislodged
- needle site becomes painful
- syringe pump is dropped or immersed in water
- Concern about patient symptoms

5.15 Malfunction of the McKinley T34 and its ancillary equipment.

Should a malfunction of a McKinley T34 syringe pump or its ancillary equipment occur the infusion should be discontinued and re-started using new equipment and Datix should be undertaken. If necessary the manufacturer of either the T34 device or ancillary products should also be informed.

If the pump is damaged or thought to be malfunctioning it should be withdrawn from use immediately and sent to Medical Engineering Services as per the Trust McKinley T34 Syringe Pump Resource pack and Medical Devices Management Policy. In cases of pump malfunction the patient must receive adequate symptom management i.e. via bolus doses until new equipment can be provided.

Any malfunction or adverse event involving use of a McKinley T34 syringe pump or its ancillary equipment must be reported electronically via DATIX in accordance with the Trust Incident Management Policy and Line Manager informed.

5.16 Maintenance, servicing and transportation of syringe pumps

Nursing teams must use systems to keep track of where their McKinley T34 pumps are, whether issued for patient use or sent to Medical Engineering Services for service. Devices sent for servicing must be cleaned with a detergent wipe and have a decontamination label attached. When a patient is transferred to another care provider with a McKinley T34 in use nursing teams must check and document the following;

- That the care provider receiving the patient is able to undertake safe use of the T34,
- That they have access to a lock box and key
- How the T34 pump is to be returned to its original source.

5.17 Nursing homes

The administration of drugs via a syringe pump in nursing homes should normally be provided by nursing home staff. However, Shropshire community nurses may be required to provide care where no other care is available to facilitate administration of drugs via a syringe pump. In this case, nursing care provided by Shropshire Community NHS Trust staff within nursing homes must be reported via the DATIX system (Incident Management Policy)

6 Consultation

This Policy was distributed to the following groups for consultation and comment;

- Community Practice Teachers: Anita Sharrad, Deana James, Tracey Fisher
- Medicines Management – Rita O'Brien
- Infection Prevention & Control Team: Liz Watkins
- Community Services Manager : Yvonne Gough
- Clinical Educator: Catherine Chaplin

- Nurse Consultant for Shropshire Community Services and Lead for End of Life Care: Cath Molineux
- Childrens Clinical Nurse Lead: Sally Crighton
- Head of Nursing and Quality – Children and families: Jo France
- Head of Nursing and Quality – Adult Services: Angela Cook

7 Dissemination and Implementation

Dissemination will be via the intranet and email and implementation will involve training as follows:

7.1 Initial Training

All staff must have had initial face to face training prior to using the McKinley T34.

New practitioners must ensure that they access training in the use of the McKinley T34 pump within 3 months of commencing their post. The formal training involves mandatory elements

Adult Nurses- accessed via the trust intranet and local trained trainers

A) Setting up of the T34 pump/Lock on competencies – 3 yearly

B) T34 McKinley online training - annually

Children Nurses – access via the trust intranet and within the CCNT

A) setting up of the T34 pump

B) safe use of drugs and symptom control in palliative care

7.1.1 Competence in the safe use of the syringe pump

This will be evidenced using the McKinleyT34 Syringe Pump Competency Based Assessment (Lock on) as contained in the Trust's McKinley T34 Syringe Pump Resource pack 2017.

7.2 Ongoing Training

Staff will need to undertake mandatory annual online McKinley T34 training and 3 yearly face to face T34 McKinley training delivered by the Trusts designated trainers and additionally lock on competencies (to be undertaken in teams). It is anticipated that a competency document and training regarding End of Life Care will be offered by the Trust in the near future.

7.3 Training Records

All training undertaken by staff must be recorded yearly on their Electronic Staff Record (ESR) record and within their personal professional portfolio of evidence. The practitioner will evidence competency in safe administration of drugs via the T34 syringe pump using the McKinleyT34 Syringe Pump Competency Based Assessment (Lock on)

7.3.1 Competency Self-Assessment

Staff should undertake self-assessment of their competency to identify their individual learning needs in order that the most appropriate training is accessed in agreement with their line manager.

7.3.2 Training Self-Assessment

It is the responsibility of each practitioner to access the appropriate training to maintain competency. It is the responsibility of managers to ensure that practitioners can access mandatory training as detailed above.

8 Monitoring Compliance

This policy will be reviewed by the authors every 3 years

Key performance indicators comprise:

- Clinical Leads, Team Leaders and the Trusts designated trainers will be responsible for ensuring that all registered nurses employed within the Trust have attended appropriate face to face training. The McKinley online learning tutorial is completed annually and the lock on competency self-assessment and face to face training is completed 3 yearly
- The names of the registered nurses who have completed training and update including the McKinley T34 Syringe Pump Competency Based Assessment (Lock on) will be sent to the training department by the Trusts designated trainers.
- The names of the registered nurses who have completed McKinley online will be recorded electronically by the training department.
- All patient syringe pump documentation will be stored with the patients nursing notes and available for audit purposes.
- All incidents and near misses involving syringe pumps will be recorded on Datix and investigated appropriately.

9 References

- CME McKinley T34 Ambulatory Syringe Pump Operational Manual 2007
- Dickman A, Schneider J, and Varga J (2002). The Syringe Pump- Continuous subcutaneous Infusions in palliative care. Oxford University Press
- Medicines & Healthcare Products Regulatory Agency. www.mhra.gov.uk
- Mental Capacity Act (2005) www.dca.gov.uk/legal-policy/mental-capacity/mca-cp.pdf
- Nursing and Midwifery Council (2015) The Code - Standards of conduct, performance and ethics for nurses and midwives. www.nmc-uk.org
- Nursing and Midwifery Council (2010) Standards for Medicines Management
- Nursing and Midwifery Council (2010) Record Keeping: Guidance for Nurses and Midwives
- Twycross et al (2002) Palliative care formulary. 2nd ed. Radcliffe Medical Press, Oxon
- West Midlands Paediatric Palliative Care Network (2011) West Midlands Children and Young People's Palliative Care Toolkit
<http://www.act.org.uk/page.asp?section=47§ionTitle=West+Midlands+Children+Young+People%27s+Palliative+Care+Toolkit>

10 Associated Trust Documents, Policies & Guidelines

- End of Life and Palliative Care Guidelines for the use of drugs
- Diabetes End of Life Care
- Scope of Prescribing: Palliative Care V300 Independent Prescribers
- Consent to Examination or Treatment Policy
- Medicines Policies – Part 1-2-4-5-6-7-8
- Adults End of Life Care Strategy
- Palliative and End of Life Care Strategy for Children and Young People
- Medical Devices Management Policy
- Waste Management Policy
- Incident Reporting Policy
- Prevention and Management of Needlestick Injuries Policy: including inoculation incidents and exposure to Blood Borne Viruses
- Standard Precautions Policy
- Hand Hygiene Policy
- Cleaning and Disinfection Policy
- Clinical Record Keeping Policy
- Community Teams Record Keeping Guidance
- Records Management Policy
- PGD Sodium Chloride 0.9% injection (flush)
- PGD Water for injections
- Standard Operating Procedure
Administration of Controlled Drugs for Community Nursing - DN001
Record Keeping for Controlled Drugs - DN003

Resource Packs

- 1. McKinley T34 Syringe Pump Resource Pack Adult 2018 - this supporting pack is available on the Trust Intranet,**
- 2. McKinley T34 Syringe Pump Resource Pack Children - this supporting pack is available on the Trust Intranet**
- 3. End of Life Plan- this is available on the Trust Intranet**