**Standard Operating Procedure for Video Directly Observed Therapy (VDOT)**

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| **Key Points**   * **The purpose of this SOP is to advise on the standardised approach to Video Direct Observed Therapy (VDOT) required in the effective treatment of patients identified with active Tuberculosis.** * **Tuberculosis Specialist Nurses have the responsibility to carry out VDOT assessment. The patient should be given the information regarding the VDOT and how the video will be reviewed and documented.** |

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| **TITLE** | **Standard Operating Procedure Standard Operating Procedure for Video Directly Observed Therapy (VDOT** |
| **Reference:** | **Resp SDU / TB> VDOT** |
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| **Prepared by** | **Margaret Holland /Lesley Broad** |
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| **Approvals** | **SDU** Dr Charlotte Campbell **Divisional** Jane Dickinson / Bronze |

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| **This guideline has been registered with the Trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt contact a senior colleague or expert. Caution is advised when using guidelines after the review date. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.** | |

**abreviations**

DOT- Direct Observed Therapy

VDOT- Video Direct Observed Therapy

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# INTRODUCTION

# Tuberculosis (TB) is a largely curable infection if individuals with the disease have access to, and are able to adhere to effective treatment regimes. Directly Observed Therapy (DOT) is a standard of care for tuberculosis (TB) treatment. The complex social and clinical interactions surrounding a person with TB can be a challenge to treatment participation and adherence. Suboptimal uptake of, and adherence to, TB treatment for people with active TB can lead to increased morbidity and mortality, increased infectiousness, and the emergence of drug resistance.

# Enhanced case management including directly observed therapy is key to improving treatment adherence and completion, in particular in relation to vulnerable groups or those at risk of non-adherence. DOT is a component of TB case management in which patients are observed to ingest each dose of TB medications (NICE 2016), Whilst DOT implies ‘supervised swallowing’ the key to its success is in the establishment of an environment and level of support from the healthcare/non healthcare professional that allows the patient to feel comfortable and willing to adhere/achieve to the treatment schedules. Treatment completion is a national key performance indicator and one of the key targets in the National TB Strategy (2015). However, it is a labour intensive process requiring the trained individual to, amongst other procedures; administer or observe the patient taking each dose of TB medication. When TB patients receive all medications as prescribed under a programme of DOT, both patients and community benefit. However, because DOT can be time and resource intensive, cost-efficient methods of delivering DOT in a form of Video Directly Observed Therapy (VDOT) is an alternative method to in-person DOT in which a patient is able to record a video of swallowing TB medication.

# SCOPE

# This SOP describes the use of VDOT for direct observation of patients ingesting the tuberculosis medication by Specialist Nurses.

1. **DEFINITIONS/ABBREVIATIONS** 
   1. **DOT**: Direct / Directly Observed Therapy
   2. **VOT:** Video Directly Observed Therapy,
   3. **Adherence**: The extent to which a person’s behaviour (in terms medication taking, following diets or executing life style changes) coincides with medical or health advice
   4. **Non Adherence**: Problems arising around adherence with medical or health advice and patient responsibility.

# Purpose

* 1. The purpose of this is to advise on the standardised approach to Direct Observed Therapy (DOT) required in the effective treatment of patients identified with active Tuberculosis thus minimising the risk of transmission to patients, visitors, staff and the general public and improve adherence.
  2. The VDOT is a method of adherence monitoring that involves patients transmitting digital images and may also include real time viewing of their ingestion of treatment to Buckinghamshire Healthcare NHS Trust (BHT) TB team for review to maximize the likelihood of completion of therapy.
  3. The VDOT is designed to meet patients’ needs and utilise available resources. It offers flexibility to those that are unable to attend clinics or see TB nurses in person daily due to life commitments e.g. travel, work, study etc as well as weekend and bank holidays when the service is not available.

1. **Duties / Organisational Structure**
   1. All **TB Nurses** within BHT involved in the provision of VDOT are responsible to adhere to this SOP.
   2. The **TB Nurses will** be responsible for carry out DOT/VDOT assessment (appendix A), receiving video, reviewing and documenting in the individuals medical health record (EVOLVE) and VDOT drug chart (appendix D) and then deleting the video daily. At weekend and bank holidays this will be undertaken the next working day
   3. **TB Nurses** are responsible for patient education, counselling and training and obtaining the consent for VDOT (appendix B). Ensuring that verbal and written information is provided to the patient. The Patient Information Leaflet (appendix C) will be given to every patient prior to starting VDOT. The leaflet **that emailing into the Trust is not secure and that it is the patient’s choice to accept the risks of doing it**
   4. **The Patient** will be responsible for recording the video of themselves swallowing their TB medication and submitting the recording via e-mail.
   5. To ensure that the video recordings are viewed as intended. All recordings will be stored securely in the same manner as a medical record until it can be reviewed, with access limited to TB clinician.
   6. The video will be seen only by TB Nurses / Consultant involved in their care.
   7. The videos will be deleted after they have been reviewed by TB Specialist Nurse /TB Nurse/Consultant.

**Matron/ Head of Nursing** have responsibility to ensure that arrangements and resources are in place to support the use; implementation and monitoring of this SOP and to present evidence to assist TB monitoring / audit. They must also ensure the dissemination, training and adherence of the guidance is established within their teams.

* 1. **The TB Service consists of:**

Lead TB Consultant

Matron for Integrated Respiratory Services

TB Specialist Nurse

TB Nurse

Administrative staff

1. **Awareness / Implementation / Training**

The following steps outline the general VDOT process:

* 1. Prior to starting VDOT a risk assessment and training is undertaken. The training will include instruction of the management of adverse reactions and how to contact the TB team if they experience any adverse reactions, this will enable the TB nurses can address any concerns, and advise the patient to seek medical care if necessary. It will be made clear to the patient that the email is not to be use to seek medical advice on adverse reactions.
  2. Ensure the patient knows who and how to contact regarding adverse reactions outside of normal working hours.
  3. The patient will record themselves taking their medication and email it the TB service each day. The video should include
* the patient verify his/her medications with a verbal and visual pill count
* clear view of the patient ingest all of the medication
* The patient confirm verbally that he/she has taken all of the medication and by opening their mouth for a visual inspection.
  1. Prior to reviewing each VDOT, the TB Nurse will review the patient information (e.g., chart, medications and medical notes and add to the records following review of the video. The video will then be deleted
  2. Real time video messaging. This is an option that may be used for some patient contacts. The process of risk assessment, education, consent and recording keeping remains the same.

1. **Monitoring Compliance of SOP**
   1. The national key performance indicator for treatment adherence applies to the TB DOT programme; 90% adherence with treatment completion (with an aspiration of 95% (WHO 2016).
      1. The following are audit indicators:
      2. Number of patients on DOT
      3. Number of observed / administered doses.
   2. It is the responsibility of the TB Specialist Nurses / TB Nurse to ensure that a final review is conducted and any improvements in service delivery are implemented

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1. **REFERENCES**
   1. World Health Organization. Global tuberculosis report 2016.
   2. Collaborative Tuberculosis Strategy for England 2015 to 2020, available at: <https://www.gove.uk/government/publivations/collaborative-tuberculosis-strategy-for-england>

NICE Clinical Guidelines 33 (2016) Tuberculosis (TB) Clinical diagnosis and management of Tuberculosis (TB) for its prevention and control. March 2006

**Appendix A. Direct Observed Therapy (DOT) Risk Assessment**

Name:……………………………………… NHS no:…….....…………………………………

Hospital no………………………….… Date Assessed………………………………….……………

Case Manager ……..……………………… Site of TB…………………………………………..........

Start date…………………………………….

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| **Risk Assessment for DOT/VDOT (NICE 2016)**  The patient:   * Does not adhere to treatment (or has not in the past) * Has previously treated for TB * Has a history of homelessness, drug or alcohol misuse * Is currently in prison, or has been in the past 5 years * Has a major psychiatric, memory or cognitive disorder * Is in denial of the TB diagnosis * Has a multidrug-resistant TB * Has request directly observed therapy after discussion with the clinical team * Is too ill to administer the treatment themselves |
| Discussed with Consultant: Dr ……………………………………………………    Date:………………………………………………….  Planned programmes of treatment:  If the patient defaults: Document    Report to TB case manager/Consultant/GP    Date  Case Manager Signature:………………………………………………… |

**Appendix B:** **Patient Video Recording Consent Form**

|  |  |
| --- | --- |
| Named Consultant: | **Name**  **DOB**  **Hospital No.**  **NHS No.**  *Patient Label* |
| Requested By: |
| Bleep / Phone no: |
| Date Requested: |
| **Patient Contact details** |
| Patient telephone No: |
| Patient Nobile No: |
| Patient email: |

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| Consent for Video Recoding | |
| **The reason why video recordings are requested for the patient is:**   * To assist with treatment * To help supervise TB treatment   Without expectation of compensation or remuneration, now or in the future, I hereby give consent to Buckinghamshire Healthcare NHS Trust (BHT) TB service to use my video recordings to monitor treatment.  We must, however ensure the interests and well-being of our patients is paramount and we have a duty to keep information confidential.   * See the video recordings in the form in which they are intended to be shown * All recordings will be stored securely in the same manner as a video record until it can be reviewed * The video will be seen only by the TB nurses / Consultant involved in their care * The videos will be deleted after they have been reviewed by the TB nurses / consultant   A video recording will be taken daily by the patient for a period between 6-9 months and sent to BHT TB service on a daily basis via email. The TB nurses/ Consultant will receive the video, review and delete it every day | |
| Clinician’s name (print) | |
| signature | Date |

|  |  |
| --- | --- |
| Agreed Video Time period | |
| Commencement date | Completion date |

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| Consent | | |
| In view of the explanation given to me by : Name ( print) | | |
|  | I consent to record videos of myself taking TB medication(s) for the purpose stated above. I will send video recordings via emails to the TB nurses. This consent is given for the agreed time period and does not require prior approval by myself within that time period | |
| Patients name: ( print) | | |
| Signature | | Date |
| Signature from: ( circle) patient .parent/ guardian: other relationship: | | |

Appendix C:

**Patient information leaflet**

**Video Directly Observed Treatment**

**Background**

Directly observed therapy (DOT) is the most effective strategy for ensuring that individuals with tuberculosis (TB) adhere to treatment plans. DOT means that a healthcare worker or another designated person watches the individual swallow each dose of the prescribed drugs. However, DOT can be time and resource intensive and intrusive for the individual, a cost effective methods of delivering DOT in the form of Video Directly Observed Therapy (VDOT) is an alternative method to ‘in person DOT’ in which an individual is able to record video of themselves swallowing TB medication

Your TB specialist nurse has made and assessment and believes that the use of technologies to make a video recording is a flexible and less invasive option to help you complete your medication successfully

**Benefits**

VDOT is highly accurate and provided reliable evidence that the medications were swallowed, with doses are recorded wherever and whenever they were taken

VDOT provides you with greater independence and privacy compared to DOT, which reduces can help to the stigma associated with TB

VDOT is ‘patient centred’ and improves communication between yourself and the TB specialist services caring for you as it gives them more time to support patients who require them more attention

Adherence to TB medication is important for successful treatment of your TB. Adherence data is used to identify where an individual is struggling with compliance and the team can prioritise their support and education to promote treatment completion.

**Recorded videos**

You will need to make a video recording of yourself each day taking your TB medication and email it to daily to [BHT.TBteam@nhs.net](mailto:BHT.TBteam@nhs.net)

**Weekend videos will be review on the following Monday.**

**Videos on a Bank holiday will be review on the next working day.**

**Health records**

The recorded video will be reviewed by the TB services daily and then the videos will be deleted. A record of this will be made in the VDOT drug chart and will be documented in you medical records, along with a copy of your consent form

**Contact Details**

Margaret Holland TB Specialist Nurse TEL: 07818458765

Chest Office TEL: 01296418120

**How can I help reduce healthcare associated infections?**  
Infection prevention & control is important to the well-being of our patients and for that reason we have infection prevention & control procedures in place.  Keeping your hands clean is an effective way of preventing the spread of infections.  We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to and after leaving the ward.  In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser as hand sanitisers are not suitable for use when dealing with patients who have symptoms of diarrhoea.

**If you need advice or further assistance, please contact our patient advice and liaison service (PALS): call 01296 316042 or email** [**bht.pals@nhs.net**](mailto:bht.pals@nhs.net)

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible, but please note that it is subject to change. Please therefore always check specific advice on any concerns you may have with your doctor.

**Appendix :D**

**Patient’s Monthly Medication Chart for Video Observed Therapy (VOT)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Day | Medicine | Medicine | Medicine | Video received And Reviewed by (print &Sign) | Video deleted by (print &Sign) | Comments |
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