

Wisconsin Electronic Video Directly Observed Therapy (eDOT)



Background

Directly Observed Therapy (DOT) is the standard of care worldwide for effective Tuberculosis (TB) treatment. DOT assures:

- Treatment adherence.
- Chemical isolation.
- Out-patient therapy.
- Patient adherence.
- Public safety with regard to disease transmission.

Benefits of DOT:

- Patient support
- Effective monitoring of treatment
- Mitigation of side effects

Definition of DOT

DOT is:

- Observing the patient take and swallow all medications to the end of treatment.
- Provided by trained individuals under the care of an RN or provider is documented and reported.

DOT is **not**:

- Allowing family or friends to observe therapy.
- Leaving medication at the bedside.
- Allowing medical professionals to self-administer the use of pill-counts.

eDOT for Wisconsin

Electronic DOT (eDOT) is the use of electronic technologies to remotely monitor TB patients ingesting their medication, either in real time or recorded. The Wisconsin State TB Program will recommend eDOT on a case-by-case basis. Eligibility for eDOT depends upon the approval of local tribal health department (LTHD), legal counsel, patient characteristics, as well as the nurse care manager's experience in TB case management and overall nursing experience. **The Wisconsin TB program recommends other in-person possibilities be explored before choosing eDOT.**

Responsibility of the LTHD Using eDOT

- Obtain legal approval from public health attorney to provide eDOT that is compliant with HIPAA.
- Ensure and maintain patient confidentiality throughout the eDOT process.
- Document medication ingestion and observations/questioning about side effects and or adverse events.
- Must have familiarity with the patient and the case management of their TB.
- Assess and report symptoms that are concerned with adverse drug reactions.
- Identify issues that affect successful eDOT implementation or maintenance and reporting.
- Ensure patient meets inclusion criteria (listed on page 2) and not the exclusion criteria as listed.





Inclusion Criteria

- Completed first two weeks of in-person treatment
- Demonstrated medication adherence while on in-person DOT (100% adherent)
- Motivated to have eDOT
- At least 15 years of age and consent obtained from the parent/guardian for those under age 18
- Speaks fluent English or LTHD should have a DOT worker fluent in the patient’s preferred language
- Able to identify each medication accurately and be able describe possible side effects (see list below)
- Patient able to demonstrate proper use of technology/application used for eDOT
- Plan for ensuring a reasonable level of privacy is in place (patient should be comfortable while discussing personal medical information)
- Reliable internet or phone connection

Side effects patient should be able to report:

✓ Headaches (chronic)	✓ Skin rashes/itching	✓ Jaundice (yellow skin/eyes)	✓ Fever (+3 days)
✓ Joint pain (chronic)	✓ Sores on lips or inside mouth	✓ Abdominal pain	✓ Convulsions
✓ Ears ringing /Fullness	✓ Visual problems	✓ Nausea/Vomiting	✓ Unusual bleeding
✓ Numbness/Tingling	✓ Dark urine (coffee colored)	✓ Malaise/Fatigue	✓ Other

Exclusion Criteria

- Adherence issues with DOT or related issues (missing appointments, dishonesty, inappropriate use of technology)
- **Under** 18 years of age (minor) without the consent of a parent or guardian
- Immunocompromised (HIV, poorly controlled diabetes)
- Substance abuse, incarceration, those with insecure or unstable housing
- Memory impairment or psychiatric concerns
- Medication intolerance/adverse reaction
- Risk for hepatic complications (alcohol or liver disease)
- Disabled or unable to fully participate such as vision impairment or other physical challenges
- Language barrier

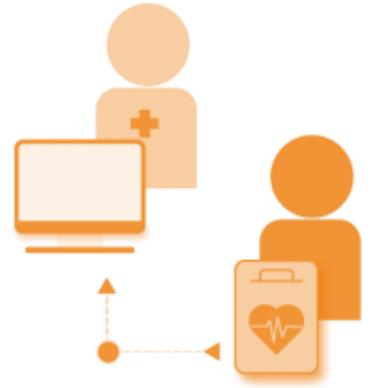
Reasons to Stop eDOT

- Changes in inclusion or exclusion criteria
- Client reports they would like to return to in-person DOT
- Adverse reaction
- Can no longer accommodate use of eDOT in a confidential setting (housing concerns, technology instability)
- Client defaults on other aspects of adherence (missing medical appointments, not returning calls)



General Real-Time eDOT Process

- Prior to each eDOT visit, the health care worker should review patient information (chart, medications, notes, appointment date, and times).
- Contact the patient at the specified time (see script).
- Ask the patient if **they** are having any adverse reactions, address any concerns, and advise the patient to seek medical care if necessary.
- Ask the patient to verify **their** medications with a verbal and visual medication count.
- Observe the patient ingest all of the medication.
- Have the patient confirm verbally that **they have** taken all of the medication and by opening their mouth for a visual inspection.
- Confirm the next eDOT visit date and time, and any upcoming in-person clinic visits.
- Remind the patient to call the health care worker if they experience any adverse reactions; ensure the patient knows who and how to contact regarding adverse reactions.

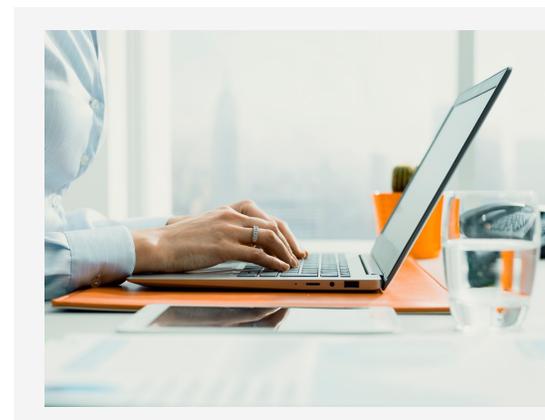


Recorded Process

The above may be modified to accommodate recorded (asynchronous) eDOT sessions. There are additional privacy concerns with the storage of eDOT sessions that should be discussed with the patient before the first recorded session. Ideally, recorded eDOT sessions should be reviewed by the DOT worker within 24 hours. DOT workers should be instructed on follow up if an eDOT session is missed or deemed insufficient by the LTHD for whatever reason.

Teaching the Patient

- The patient should be in well-lit space.
- The health care worker must be able to see the patient's face.
- The patient should have a glass of water nearby to take their medication.
- The patient should show each pill before taking it: state the name of the medication, shape, size, color, and the number of tablets or capsules they are taking.
- The health care worker should ask how the patient is feeling to assess adverse reactions, and advise the patient to seek care if necessary.



All eDOT encounters (and attempts) should be documented by the LTHD. Reassess the ability to participate in eDOT:

- With non-adherence.
- After experiences of adverse reactions.
- After lost communication.
- If clinical status worsens.





Staff Responsibilities

- Document each encounter following the agency policy
- In case of technical failure while utilizing eDOT, follow up with patient and complete DOT in-person
- Provide client with information about who to call with questions or in an emergency



Billing the Wisconsin Tuberculosis Dispensary Program

- LTHDs may request reimbursement from the Wisconsin TB Dispensary Program for staff time engaged in eDOT.
- eDOT should be billed for no longer than 15 minutes per appointment and must be performed by RN or trained DOT worker who is a health department employee.
- Please see the Wisconsin TB Dispensary contract, Attachments A and C, for the most current policy and CPT codes for requesting reimbursement for eDOT. If you have questions about your dispensary contract, please [contact](#) the Wisconsin Tuberculosis Program.



Notes on eDOT for the Treatment of Latent TB Infection (LTBI)

- The Wisconsin TB Program highly recommends DOT for high-risk patients taking the once weekly regimen of isoniazid and rifapentine (3HP) and intermittent isoniazid regimens (twice weekly INH).
- High-risk patients include those who were born or lived in TB endemic countries, people living with HIV, and contacts to infectious active TB.
- If the medications for 3HP are obtained from the Wisconsin TB Dispensary, use of DOT is required.
- The same inclusion and exclusion criteria for eDOT apply, with the exception that patients do not need to complete two weeks of in-person DOT before starting eDOT.
- LTHDs are still encouraged to assess the patient and situation thoroughly before determining the patient is eligible for eDOT.

The proceeding forms (pages 5-7) are only examples or templates. LTHDs are free to edit/modify their own forms if they so choose and use these as a basis for their own.



Electronic Directly Observed Therapy (eDOT) Agreement



Client Name: _____
(printed)

Parent/Guardian: _____
(printed)

I am aware that I have been diagnosed with Tuberculosis (TB) and will need a long course of medications. Talking with my health department regularly and having staff observe me taking my medications is the best way to make sure I have successful treatment. Medication observations and monitoring (Directly observed therapy [DOT]) is generally done in the patient's home or at the health department. By signing this document, I voluntarily agree to use electronic DOT in place of in-person DOT visits.

I understand that:

- During each eDOT session, _____ (insert name of LTHD or DOT worker) will observe me swallowing tuberculosis medications.
- They will not save or archive any eDOT session without my consent.
- The video conferencing software is secure, however, I am responsible for the internet privacy settings on downloaded software on my electronic device.
- I may choose to switch back to standard in-person DOT at any time.
- I must keep all my eDOT appointments and clinic appointments in order to continue eDOT.
- If I do not keep my appointments satisfactorily, I may be required to return to in-person DOT.

If I have any questions, or need assistance in setting up or performing eDOT, I agree to contact _____ (LTHD or DOT worker) at _____ (phone).

By signing below, you acknowledge being counseled on eDOT and understand the above checklist.

Client

LTHD employee

Date

Date



Electronic Directly Observed Therapy (eDOT) Checklist



The current standard of care in Wisconsin is for doses of TB medications to be observed in order to ensure successful treatment and monitor for side effects. Directly observed therapy (DOT) is generally done in the patient’s home or at the health department. Electronic/Video DOT (eDOT/vDOT) can be used in place of in-person DOT once a patient is tolerating a stable regimen, understands the process, and is willing to follow the protocol set by health department or DOT worker. The following checklist should be reviewed with the patient before starting eDOT.

- Each eDOT visit will take place at a predetermined time each day.
- During each eDOT call, the patient will be observed swallowing tuberculosis medications.
- The patient will be educated on how to show and consume each medication.
- All eDOT sessions will be live and won’t be recorded.
- The video conferencing being used is considered secure, but the patient is responsible for the internet privacy settings on downloaded software and on their electronic device.
- A patient may be switched back to standard in-person DOT at their own request or the health department’s request at any time.
- The patient must keep eDOT appointments and clinic appointments in order to continue eDOT.

Client

Date

DOT Worker

Date



Health Care Provider Script: Electronic

Directly Observed Therapy (eDOT) Real-Time Encounter

1. Staff and patient connect at the scheduled time using the agreed upon technology.
2. “Hello, this is _____ (*health care provider*).”
3. “Can you please confirm that I am speaking to _____ (*patient*)?”
4. “Have you had any negative reactions to the TB medicine?”

If yes, follow your health department’s protocol to ensure the patient receives medical attention. **If no** adverse reactions, then proceed with step #5.

5. “Show me each pill separately and say the name of each medication.”
2. “Put each pill in your mouth and drink at least 4 ounces of fluid after you take your pills.”
3. “Please open your mouth and show me that the pills were swallowed.”
4. “Let’s confirm the time and date for the next eDOT appointment (or in-person clinic appointment if upcoming). Your next eDOT appointment is tomorrow at (*time*). Your next in-person clinic appointment is scheduled for (*day*) at (*time*).”
5. “Do you have any other concerns?”
6. “Thank you I look forward to talking with you tomorrow at (*confirmed time of next call*). Good-bye.”



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