

Component 2: Health Education Evaluation Tool

Why the health education component of tool?

Health education and the relationship between patients and provider are important aspects to ensure treatment success. Use this section to observe patient intake on a typical day of either initiating treatment, providing directly observed therapy (DOT), or refilling medication. Ideally include patients in the intensive phase, at the beginning the continuation phase, and at some other point in the continuation phase of treatment.

This tool should be used in combination with the clinical encounter evaluation tool, as items are not repeated between the two.

Who should do this evaluation?

The evaluator should have a working knowledge of TB and either speak the language or use an independent translator to not disrupt the clinic.

Further explanation of tool

There are 3 parts:

1. Evaluation worksheet for evaluator to complete
2. Scoring guide that provide suggested scores, rating, and comments and recommendations section
3. Explanation worksheet that explains the importance of each item scored, including references

In completing the evaluation worksheet, the evaluators should watch three to five patients coming for various stages of treatment. The point values are assigned from the experience gained during the pilot testing and are only suggestions. If you, as the evaluator, believe the scoring should be different that is appropriate, your experience along with the tool should direct your scoring. Resulting scores (suggested or locally adapted) of sub-sections of this component would be important to share with the program because the component covers a broad range of topics and different sub-sections may have different levels of competencies. In addition, you may want to give partial points. Partial item point values should be explained and recommendations given in the **Comments and Recommendations** section after the score guide. If major deficiencies are observed in any sub-section during the evaluation, the evaluator should intervene to improve the program where needed.

Part 1: Health Education Evaluation Worksheet

Site _____ Country _____ Date _____
dd/mm/yy

Write point score in last column if item passed. Write “0” if item failed. Write N/A if “not applicable” or N/E if “not evaluated.”

| Item No. | Point Value | Description (<i>Evaluator observes healthcare workers (HCW).</i>) | Suggested Score |
|-------------------------------------|-------------|--|-----------------|
| Individual Patient Education | | | |
| Adherence | | | |
| 1 | 5 | Asks patients if they missed any days of therapy | |
| 2 | 3 | If they missed treatment, asks what they did (whether took the next day) and counsel them about strategies for better treatment adherence (<i>If no adherence problems, give 3 points</i>) | |
| 3 | 5 | Reminds patients about the dangers of defaulting from treatment | |
| 4 | 1 | If starting continuation phase, tell patients the difference between the intensive and now continuation phases of treatment (<i>If not applicable, put N/A under score</i>) | |
| 5 | 3 | Congratulate patients on how far they have come in their treatment, tell them how much longer they have, and how important it is not to default now even though they feel well | |
| Side Effects | | | |
| 6 | 5 | Asks patients about any new symptoms (possible side effects to the medications) | |
| 7 | 4 | Reminds patients to come to the clinic immediately if they have severe side effects, such as cola colored urine | |
| 8 | 2 | Asks female patients about pregnancy, if on streptomycin (<i>If male or if not pregnant, give 2 points</i>) | |
| 9 | 2 | Asks about eyesight and inability to see red and green colors, if on ethambutol (<i>If ethambutol not given, give 2 points</i>) | |
| 10 | 2 | Offers patients ibuprofen (or other anti-inflammatory drug), if experiencing joint pains | |
| 11 | 2 | Gives patient pyridoxine/vitamin B6, if experiencing tingling or burning sensation in hands or feet | |
| Contacts | | | |
| 12 | 5 | Tells patients to bring their children <5 years of age for testing | |
| 13 | 5 | Tells patients to bring neighbors, family members, or other contacts who have been coughing for 2-3 weeks to the clinic for testing | |
| Risks | | | |
| 14 | 4 | Tells patients about risks to their liver of drinking alcohol and taking acetaminophen/paracetamol while on TB medications (<i>Give 2 points for each</i>) | |
| 15 | 1 | Tells patients about risks to their lungs of smoking | |
| 16 | 3 | Offers patients HIV testing, if not accepted before (<i>If already accepted, give 3 points</i>) (<i>If testing not offered in TB clinic or location where offered not explained to patient, give 0 points</i>) | |

Part 1: Health Education Evaluation Worksheet

| Item No. | Point Value | Description <i>(Evaluator observes healthcare workers (HCW)).</i> | Suggested Score |
|----------|-------------|---|-----------------|
| | | Follow-up: | |
| 17 | 2 | Addresses all patient fears, misunderstandings, and questions | |
| 18 | 5 | Makes next appointment for patients and tell them exactly where they need to return, including for sputum smears <i>(If all explained except location of lab, give 4 points)</i> | |
| 19 | 1 | Invites any further patient questions and answer them accordingly | |
| | | Community Education: <i>(Workers or TB control programs)</i> | |
| | | Health Outreach Program: | |
| 20 | 2 | Disseminates messages broadly using a variety of media, including religious, social, and economic organizations <i>(This can only be assessed by making observations within the community and talking to community leaders. Give 1 point for some health outreach, but not a variety of outreach)</i> | |
| 21 | 2 | Uses cured patients as teaching resources | |
| 22 | 1 | Holds group sessions as well as individual sessions | |
| A | | Score Achieved (add score achieved for items 1-22) | |
| B | | Value of All N/A OR N/E Responses | |
| C | | Suggested Total Score Possible (65 points possible minus value in line B, above) | |

Part 2: Health Education Scoring Guide

Site _____ Country _____ Date _____
dd/mm/yy

Suggested Score Guide

| | |
|--|--|
| | Total Score from previous page (Line A) |
|--|--|

| | |
|--|---|
| | Total Score Possible from previous page (Line C) |
|--|---|

| | |
|--|--|
| | Rating If Line C=65, use RANGE below; if TOTAL POSSIBLE POINTS <65, use PERCENTAGE |
|--|--|

| Percentage | Range | Rating | Suggested Time Until Next Assessment |
|------------------------------------|------------------|-----------|--------------------------------------|
| Line A divided by Line C (A/C)*100 | Use if Line C=65 | | |
| >=85% | 55-65 | Excellent | Needs assessment in 12-18 months |
| 70-84% | 46-54 | Good | Needs assessment in 9-11 months |
| 50-69% | 33-45 | Poor | Needs assessment in 6-8 months |
| <=49% | <=32 | Failed | Needs assessment in 2-5 months |

Comments and Recommendations *(give item no.)*

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Part 3: Health Education Explanation Worksheet

| Item No. | Explanation |
|----------|---|
| | Individual Patient Education |
| | Adherence |
| 1-3 | <p>If patients stop drugs before treatment course is complete (even for a short time) the bacteria that are not killed can grow stronger than the drugs being taken. The patient's TB bacteria can be stronger than the first-line treatment; the person can develop drug-resistant TB, so more drugs will be needed for cure. If a patient stops completely, he or she will become sick again; could spread TB to others, especially family members and young children; or could even die. Education should also include that for each day of therapy missed, additional days of treatment may be given, especially for HIV-infected patients.</p> <p>There are several ways that health staff can help patients predict potential problems and proactively solve them for successful, uninterrupted treatment. Simple daily life events and circumstances can be responsible for a patient not respecting his or her treatment regimen. The staff talk about these obstacles and help the patient find solutions.</p> <ul style="list-style-type: none"> • Link a daily routine to taking medicines to reduce the possibility of forgetting to take the medicine. • Possible routine activities could be a meal, before or after morning prayers, or bathing. Potential activities will be different according to each population. • If a dose is forgotten, it should be taken as soon as possible. If it is almost time for the next dose, skip the missed dose and go back to the daily routine. <p>The most important thing the staff can do is to help the patient see the causes of adherence problems,</p> <ol style="list-style-type: none"> 1. Define what the problem is with the patients, 2. Search for solutions together, and 3. Anticipate future problems. <p>It is important at each monthly visit that health staff revisit the adherence problems the patient has faced to make sure that they do not continue to be problems. One way to assess for missed pills is to have patient return each visit with pill bottle or blister pack (ideally, treatment should be provided under directly observed therapy).</p> |
| 4-5 | Continuation versus intensive therapy should be explained even though the number of pills may be the same with combination pills. |

Part 3: Health Education Explanation Worksheet

| Item No. | Explanation | | | | | | | |
|--|--|--|---|--|---|-------------|--|--------------------------------|
| | Side Effects | | | | | | | |
| 6-11 | <p>Staff explain and ask about severe side effects. Most people have no problems with treatment. Most side effects will occur only in the beginning of treatment and go away on their own after a few weeks. Tell the patient to report <u>any</u> side effects, except orange/red urine when taking rifampicin, to the clinic. The most common side effects are stomach-gut complaints, such as loss of appetite, stomach pain, nausea, or vomiting. If the patient is nauseated after taking drugs, he or she should take medication with food or milk. Eating multiple small meals and eating before going to sleep may help with these symptoms. Because most of the drugs are broken down by the liver, swelling or damage of the liver can occur. However, severe liver damage (called severe hepatotoxicity) occurs in only 1 in 1,000 people. Liver swelling or damage cause nausea and vomiting and the urine to turn dark (like the color of cola). This must not be confused with urine turning orange/red, which happens when taking rifampicin. Tell the patient if he or she feels nauseated <u>and</u> has dark-colored (not red/orange) urine to stop taking the drugs and return to clinic immediately. A monthly color vision examination to assess ethambutol toxicity should be part of the routine screening examination.</p> <table border="1" data-bbox="240 817 1417 1115"> <tr> <td data-bbox="240 817 1417 862">Other side effects include (see Appendix A) (9):</td> </tr> <tr> <td data-bbox="240 862 1417 907">• Skin reactions such as itching or skin rash</td> </tr> <tr> <td data-bbox="240 907 1417 952">• Reactions of the nerves such as burning (with isoniazid)</td> </tr> <tr> <td data-bbox="240 952 1417 996">• Pains in the joints (with pyrazinamide)</td> </tr> <tr> <td data-bbox="240 996 1417 1041">• Dizziness</td> </tr> <tr> <td data-bbox="240 1041 1417 1086">• Decrease in sight or difficulty telling red and green colors apart (with ethambutol)</td> </tr> <tr> <td data-bbox="240 1086 1417 1128">• Deafness (with streptomycin)</td> </tr> </table> | Other side effects include (see Appendix A) (9): | • Skin reactions such as itching or skin rash | • Reactions of the nerves such as burning (with isoniazid) | • Pains in the joints (with pyrazinamide) | • Dizziness | • Decrease in sight or difficulty telling red and green colors apart (with ethambutol) | • Deafness (with streptomycin) |
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| • Pains in the joints (with pyrazinamide) | | | | | | | | |
| • Dizziness | | | | | | | | |
| • Decrease in sight or difficulty telling red and green colors apart (with ethambutol) | | | | | | | | |
| • Deafness (with streptomycin) | | | | | | | | |
| | Contacts | | | | | | | |
| 12-13 | <p>Methods for contact tracing of close contacts can be found in the references (10). Anyone can get TB. If one person has TB and coughs, sneezes, or even talks or sings near another, that person can breathe in the TB bacteria and get TB. This is especially true for any children younger than 5 years old and for people with weak defenses, such as people with HIV infection. The biggest chance of getting TB is from spending a lot of time with people who have TB and who are not being treated, especially where there is poor air flow or in poorly ventilated areas. A lot of time usually means 8 hours or more. Any young children and others close to the TB patient who has symptoms of TB (night sweats, fever, a cough lasting more than 2-3 weeks, weight loss, fatigue, chest pain while breathing or coughing) should report to the clinic immediately to be tested for TB. Young children may have no symptoms, except failure to gain weight or weight loss.</p> | | | | | | | |

Part 3: Health Education Explanation Worksheet

| Item No. | Explanation |
|----------|---|
| | Risks |
| 14-15 | <p>Health staff needs to explain risks and contraindications. Some patients receiving TB treatment also may be abusing alcohol or local brew at the time of their diagnosis and treatment. It is important that these patients are counseled on the risks that alcohol and local brew pose to those taking TB therapy. Specifically, the combination can have bad effects on the liver and nerves. There is the potential that TB treatment could harm the liver. Liver damage is more likely and more serious in people who are heavy alcohol users.</p> <p>Health workers should be open and honest with patients when talking about alcohol use and should be careful not to be judgmental.</p> <p>In addition explain,</p> <ul style="list-style-type: none"> • Paracetamol or acetaminophen, like alcohol, is broken down by the liver. So paracetamol can harm the liver. For headaches, joint or muscle pain, or fevers, inform patients that they can take drugs, such as ibuprofen or aspirin. Children should not take aspirin, if they have a fever. • Cigarette smoking can scar the lungs and prevent the lungs from clearing the sputum or phlegm. TB patients should stop smoking or never start. |
| 16 | <p>Staff needs to recommend HIV testing. HIV affects the body's defenses or immune system and makes people more vulnerable to TB; TB can develop more often, rapidly, and more often travel outside the lungs to other parts of the body, like the lining of the brain, causing TB meningitis. Having TB does not mean the patient has HIV. Both HIV and TB have treatment and TB can be cured. If close exposure to smear-positive patients occurs but the HIV-infected person is without disease, this person should receive prophylaxis (isoniazid 5 mg/kg or 300 mg daily) for 6 months (1, 11, 12).</p> |
| | Follow-up |
| 17-19 | Staff needs to be open by addressing fears, welcoming questions, making next appointment. |
| | Community Education |
| | Health Outreach |
| 20 | <p>Broadly disseminate messages using a variety of mediums to maximize the number of people with TB knowledge and their ability to communicate these messages to others. By saturating the community with knowledge, healthy behaviors regarding prevention, early case detection, and decreasing stigma become social norms.</p> <p>Religious services can be one of the best ways to disseminate messages. Religious leaders are often well respected for their views even in nonreligious matters, such as health. They also have a captive audience at religious services, which can be used creatively to talk about disease in the community.</p> <p>Social organizations, such as women's groups, youth groups, etc. often can creatively adapt messages to local situations and often have capable and willing participants.</p> <p>Economic organizations, such as farmer's cooperatives or local business owners can also be important allies to get messages into the community. In low-resource settings, these organizations are often composed of men, who are responsible for decision-making in their households. Thus, getting their cooperation and understanding can affect entire households.</p> <p>Other media not mentioned here also should receive partial points.</p> |
| 21 | Use cured patients as teaching resources because of their knowledge of the disease, treatment regimens, drug side-effects, etc. Do not identify any individuals currently with TB. They can also be helpful in decreasing the stigma associated with the disease by demonstrating that TB is curable. |
| 22 | Use group sessions as well as individual sessions to reach as many people in as many ways as possible. |