

Improving Completion of LTBI Treatment in Infected Contacts: Orange County's TIP Action Plan

Mike Carson, MSPM
Program Manager, TB Control
County of Orange Health Care Agency

TIP Indicator D4: Contact Treatment Completion

Definition:

Proportion of infected contacts to pulmonary cases started on treatment for LTBI who complete treatment

TIP Process

1. Review indicator data
2. Analyze and plan
 - Verify problem
 - Determine reasons for problem
3. Develop interventions
4. Implement interventions
5. Evaluate and reassess



Orange County TIP Process

Step 1	Review indicator data	November 2003
Step 2	Analyze and plan	January 2004
Step 3	Develop interventions	March - June 2004
Step 4	Implement interventions	April 2004 to present
Step 5	Evaluate and reassess	September 2004 & March 2005

Step 1 – Review Indicator Data

Indicator D4 (Completion of LTBI Treatment in Contacts) was selected for intervention because:

- 1) Current performance:
 - 2001 cohort = 56% contact treatment completion (only data available when this indicator was selected)
 - 2002 cohort = 74% contact treatment completion
 - 2003 cohort = 72% contact treatment completion
- 2) Infected contacts are at high risk for breaking down w/ TB disease – contact treatment completion is a high priority
- 3) Improvement on this indicator will likely lead to improvement on other contact indicators
- 4) Clinic focus is now on high-risk patients due to budgetary-forced reduction in services

Step 2 – Analyze and Plan

- Hold all-staff meeting
- Orient staff to the TIP process
- Develop contributing factors diagram for Indicator D4 -- contacts completing treatment for LTBI
- Generate possible solutions to improve the number of contacts completing treatment for LTBI

Step 2 – Analyze and Plan (cont)

Main contributing factors for contacts not completing treatment for LTBI:

- Clinic issues
- Patients get lost
- Patients are scared of side effects
- Limitations with patient education

Step 3 – Develop Interventions

- Review draft contributing factor diagrams
- Generate possible solutions for each main contributing factor
- Prioritize interventions to include in action plan and assess feasibility

Step 4 – Implement Interventions

Objective 1 - Beginning in April 2004, implement more worksite and school-based clinics for worksite and school contact investigations and for treatment of employees and students on LTBI treatment

**Step 4 – Implement Interventions
(cont)**

Objective 2 - By 8/30/05, reduce the number of broken appointments (BA) for infected contacts on LTBI treatment.

- Develop a written protocol for BAs
- Simplify contact letters
- Develop an incentive/enabler system

**Step 4 – Implement Interventions
(cont)**

Objective 3 - By 8/30/05, reduce the number of infected contacts on LTBI treatment who are lost to follow-up.

- Implement broken appointment protocol
- Form a contact investigation team

**Step 4 – Implement Interventions
(cont)**

Objective 4 - By 8/30/05, reduce the number of infected contacts who do not complete LTBI treatment due to side effects (SE) concerns

- Train staff on how to discuss SE
- Improve patient education regarding SE

**Step 4 – Implement Interventions
(cont)**

Objective 5 - By 8/30/05, improve the quality of existing interpretation services

- Train interpreters in conjunction with State Refugee Health Services
- Show Curry Center video, "Making the Connection: An Introduction to Interpretation Skills for TB Control"

**Step 4 – Implement Interventions
(cont)**

Objective 6 - By 8/30/05, increase the % of private physician managed infected contacts started on LTBI treatment that complete treatment

- TB Controller to educate private physicians during hospital grand rounds

Step 5 – Evaluate and Reassess

- Hold quarterly "update" meetings
- September 2004 & March 2005
- Review status of action plan objectives and activities
- Update action plan
- Evaluate short and long-term outcomes

TIP “Lessons Learned”

- TB Management Team approach useful in guiding the TIP process
- TIP indicators provide a framework to look at data and associated processes and outcomes
- TIP deadlines and objectives add structure to program evaluation activities

TIP “Lessons Learned” (cont)

- Staff buy-in — staff enjoyed participating and being asked for their opinions about indicator contributing factors and interventions
- TIP indicator data used to identify areas of program need requiring additional funding support from the county Board of Supervisors
- State has been able to summon the resources so that people from TBCB could be on site

Acknowledgements

- County of Orange TB Controller, Dr. Julie Low
- TB Management Team
- TB Control Staff
- Anne Cass and TBCB Support Staff

Questions?

Contact Information:

Mike Carson

(714) 834-8406

mcarson@ochca.com

COUNTY OF ORANGE HEALTH CARE AGENCY
Pulmonary Disease Services (TB Control)
Treatment of Latent Tuberculosis Infection:
Follow-up of Broken Clinic Appointments (05/12/2005)

The purpose of this procedure is to establish guidelines for following-up on broken appointments (BA) for clinic clients receiving treatment for latent tuberculosis infection (TLTBI).

PROCEDURE (edited version)

I. FIRST BROKEN APPOINTMENT (BA #1):

A. Office Support Staff:

1. Route chart to Clinic Nurse by the end of the AM or PM shift (whichever is appropriate) if client fails scheduled appointment.

B. Clinic Nurse or Outreach Worker:

1. Telephone client within **1-2 working days**.
2. If contact with client is made:
 - a) Reinforce importance of keeping appointment.
 - b) Transfer call to appointment desk and request an appointment within **10-14 days**.
3. If unable to contact client or if telephone number is incorrect:
 - a) Reschedule appointment for 10-14 days after first missed appointment.
 - b) Mail BA letter with new appointment to client's last known address within **5 working days**.
4. Document action taken. Place copy of the BA letter on chart.

II. SECOND BROKEN APPOINTMENT (BA #2): Two consecutive, or two non-consecutive missed appointments.

A. Office Support Staff:

1. Route chart to Clinic Nurse by the end of the AM or PM shift (whichever is appropriate) if client fails scheduled appointment.

B. Clinic Nurse or Outreach Worker:

1. Telephone client within **1-2 working days** of broken appointment.
2. If contact with client is made:
 - a) Reinforce importance of keeping clinic appointment.
 - b) Transfer call to appointment desk and request an appointment within **10-14 days**.
 - c) Document action taken.
3. If unable to contact client or if telephone number is incorrect or disconnected:
 - a) Schedule new appointment for **10-14 days** following the second missed appointment.
 - b) Document action taken.
 - c) If Outreach Worker made call, route chart to Clinic Nurse for follow-up.

COUNTY OF ORANGE HEALTH CARE AGENCY
Pulmonary Disease Services (TB Control)
Treatment of Latent Tuberculosis Infection:
Follow-up of Broken Clinic Appointments (continued)

C. Clinic Nurse:

1. Prepare duplicate BA letters noting rescheduled appointment
2. Make referral to Support Services Unit for Outreach Worker field visit
3. Attach prepared BA letters to the Home Visit Record.
4. Document action taken and place copy of BA letter in chart.

D. Outreach Worker:

1. Make home visit within **5 working days** of BA #2.
2. If client is home:
 - a) Reinforce importance of keeping clinic appointment.
 - b) Provide client with BA letter in a sealed envelope.
3. If client is not at home:
 - a) Leave BA letter in sealed envelope at client's residence.
 - b) Mail duplicate BA letter upon return to clinic.
4. Document action taken in client's chart.
5. Route chart to Distribution for filing pending next scheduled appointment.

III. **THIRD BROKEN APPOINTMENT (BA #3):** Three consecutive, or three non-consecutive missed appointments.

A. Office Support Staff:

1. Route chart to Clinic Nurse by the end of the AM or PM shift (whichever is appropriate) if client fails scheduled appointment.

B. Clinic Nurse:

1. Complete Treatment for TLTBI Case Review Form and route chart to next scheduled TLTBI Case Conference for review.

IV. **FOLLOWING UP ON RECOMMENDATIONS FROM TLTBI CASE CONFERENCE**

A. Clinic Nurse:

1. Implement TLTBI Case Conference recommendations.
2. Document action taken in client chart.
3. Document disposition on TLTBI Case Review Form, sign and date entry.
 - a) Review completed Case Review Form at next TLTBI Case Conference.
 - b) Copy Case Review Form for client chart.

For further information, please contact:

Mike Carson, TB Program Manager
(714) 834-8406
mcarson@ochca.com