

Quality Improvement Project

Improvement of SPA 3 & 4 LTBI Completion Rate

Tiffany Romo, M.P.H. and Lana Sklyar, M.P.H.
Service Planning Areas 3 & 4

February 23, 2017



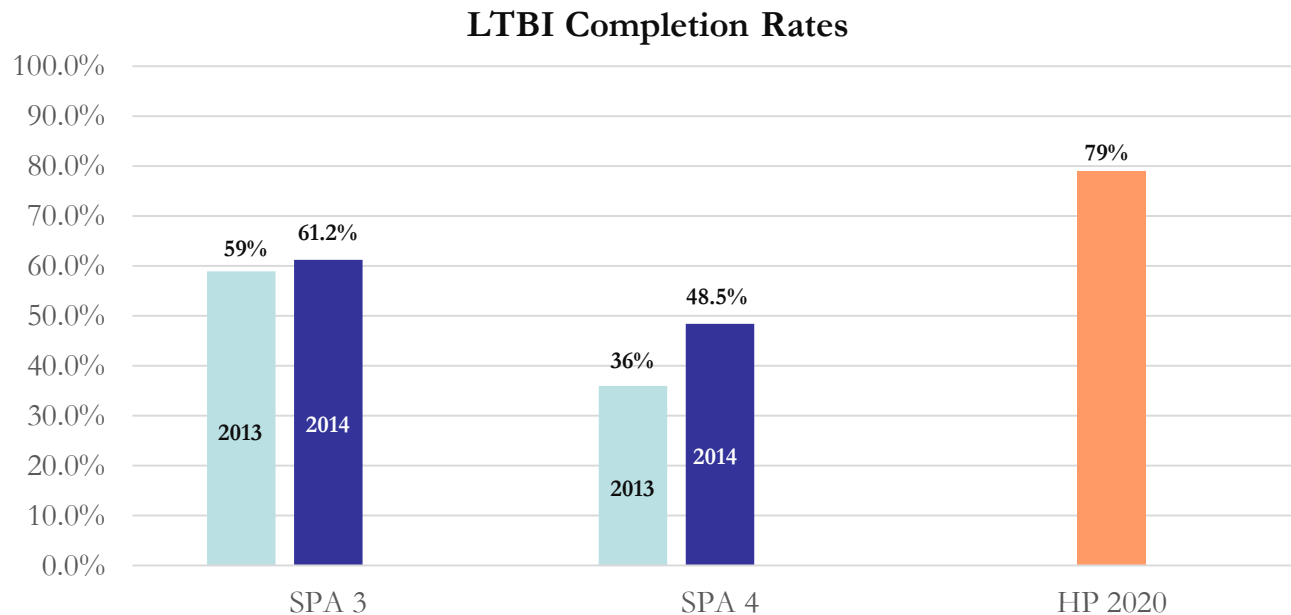
PLAN- Assemble the Team

- Project Team assembled with representation from all disciplines involved in the care and treatment of patients with Latent Tuberculosis Infection (LTBI) at 4 health centers in SPA 3 &4
- Team included: Area Medical Director and physicians; Nurse Managers and District Public Health Nurse Supervisors; Supervising Clinic Nurses and key clinic staff; Business Office supervisors; and the Health Program Analysts



PLAN- The Problem

- SPA 3 & 4-level data provided by the TB Control Program
- SPA 3 & 4 LTBI completion rates were significantly lower than the Healthy People 2020 goal of 79%



PLAN- Examine the Current Approach

- LTBI patients were prescribed Isoniazid (INH) therapy for 6-9 months
- Historically, 3HP, a 3 month LTBI therapy, was only prescribed for homeless clients



PLAN- Identifying All Possible Causes

- LTBI patients taking INH therapy for 6-9 months, possibly up to 12 months if complications occurred
 - Reduced treatment compliance due to long treatment time
- Patients complained of medication side effects and did not return to clinic for follow up
- Some patients experience cultural barriers to taking medication



PLAN- Causes Prioritized

- Used Control and Influence Matrix to prioritize reducing LTBI treatment time

	Control	No Control
Influence	LTBI patients were prescribed (INH) therapy for 6-9 months, possibly up to 12 months if complications occurred	Patients complained of medication side effects and did not return to clinic for follow up
No Influence	Some patients experience cultural barriers to taking medication	



PLAN- Strategies Identified

- Expand short-course LTBI therapy (e.g., 3HP, Rifampin) to clients who meet the criteria outlined in CHS Policy 509
 - 3HP would decrease the length of treatment time to approximately 3 months and Rifampin would decrease treatment to 4 months
- Create LTBI Treatment Tracking Form per health center to track the number of clients completing LTBI treatment in real time
- Review CHS Policy 509 with all project staff and train them on utilizing the tracking log



PLAN- Strategies Prioritized

- All identified strategies were selected
- Expanding short-course LTBI therapy was the top priority
 - Met with AMD & physicians to ensure that they would primarily prescribe short-course therapy to all eligible patients



PLAN

Aim Statement:

If we implement short-course LTBI therapy by 12/01/15, then 2013 and 2014 LTBI completion rates will increase by 5% by 09/30/16 in SPA 3 & 4.



DO- Strategy Implemented

- From 12/01/15 to 6/30/16, SPA 3 & 4 used a tracking form to monitor client completion of LTBI treatment
- On a quarterly basis, staff submitted their tracking forms and results were tabulated and shared with the Project Team
- Staff noted reasons for clients refusing LTBI treatment and made sure to provide additional education about the importance of LTBI treatment, especially 3HP



DO- Strategy Implemented

SPA 3 & 4 LTBI Treatment Tracking Form

12-DOSE INH RIFAPENTINE 2015-2016											
Health Center:											
*Treatment Reason:											
Contact: HPC, MPC, correction Facility, homeless, Refugee, Foreign born, convertor, TBIV											
* Please track all clients who begin 3HP treatment from 12/1/2015 – 6/30/2016											
	LAST NAME	FIRST NAME	DOB	SEX	HEALTH CENTER	*Tx. Reason	RX Start Date	RX End Date	COMMENT	RN ASSIGNED	
1	EXAMPLE:	SMITH	JOHN	5/2/1972	M	CHC/SATELLITE	Homeless	1/12/16	4/7/16	Completed	
2											
3											
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3 HP Regimen INH Regimen Rifampin Regimen +



Do-Tracking Implementation

Statement of measure	LTBI Treatment completion rates
Target population	Patients starting LTBI treatment at SPA 3 & 4 health centers
Numerator	91 patients in SPA 3 and 54 patients in SPA 4 completed LTBI treatment during study period
Denominator	139 patients in SPA 3 and 77 patients in SPA 4 started on LTBI treatment during study period
Source of data	SPA 3 & 4 Tracking Log
Target goal	Increase the percent of LTBI patients who complete treatment by 5%.
Who tracks data and how often	Clinic staff on a daily basis; HPA reviews every three months, tabulates, and shares results with project team

STUDY

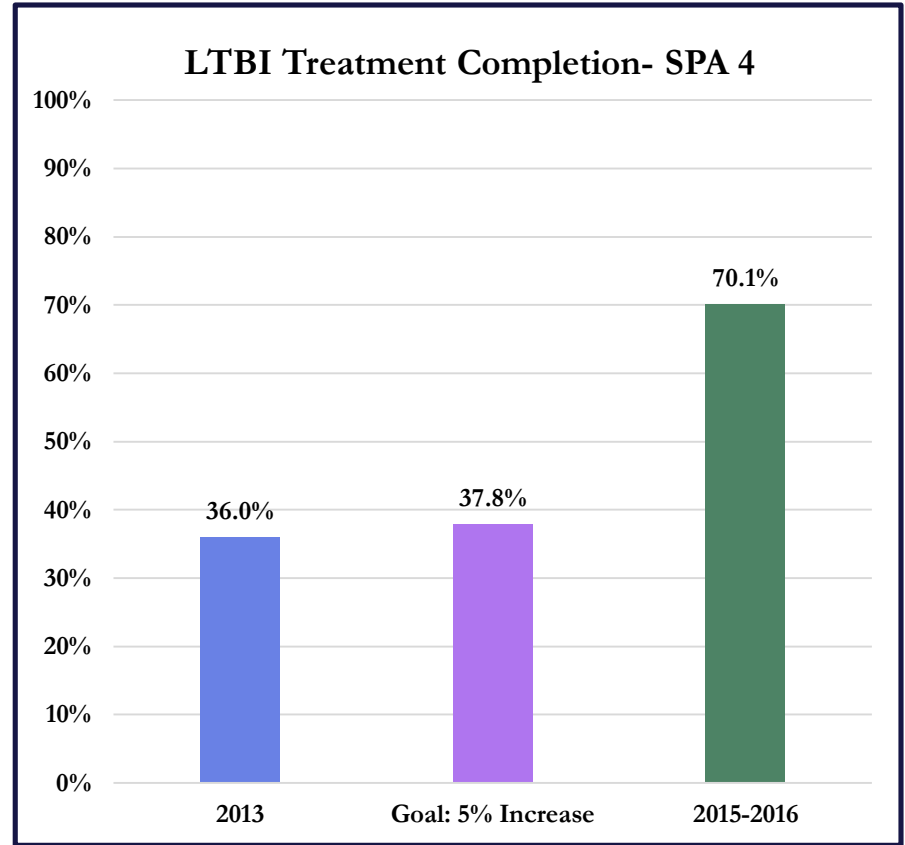
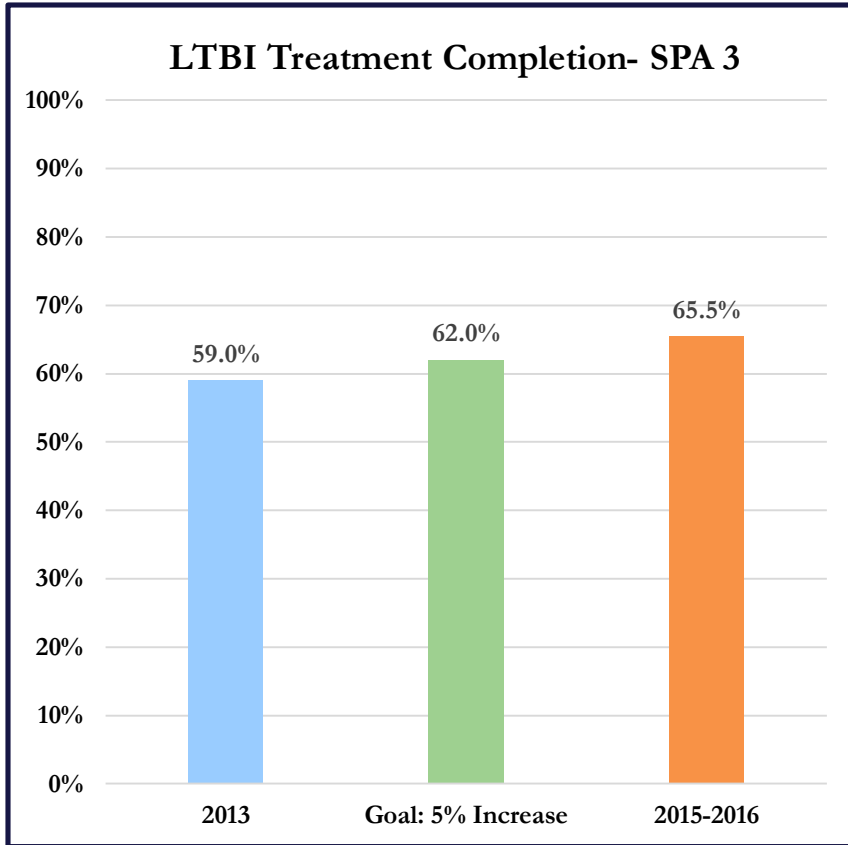
Check the Results

- Data from the tracking form show that through this project, we exceeded our goal of increasing the percent of LTBI patients who complete treatment by 5%, when compared to both 2013 and 2014 baseline rates



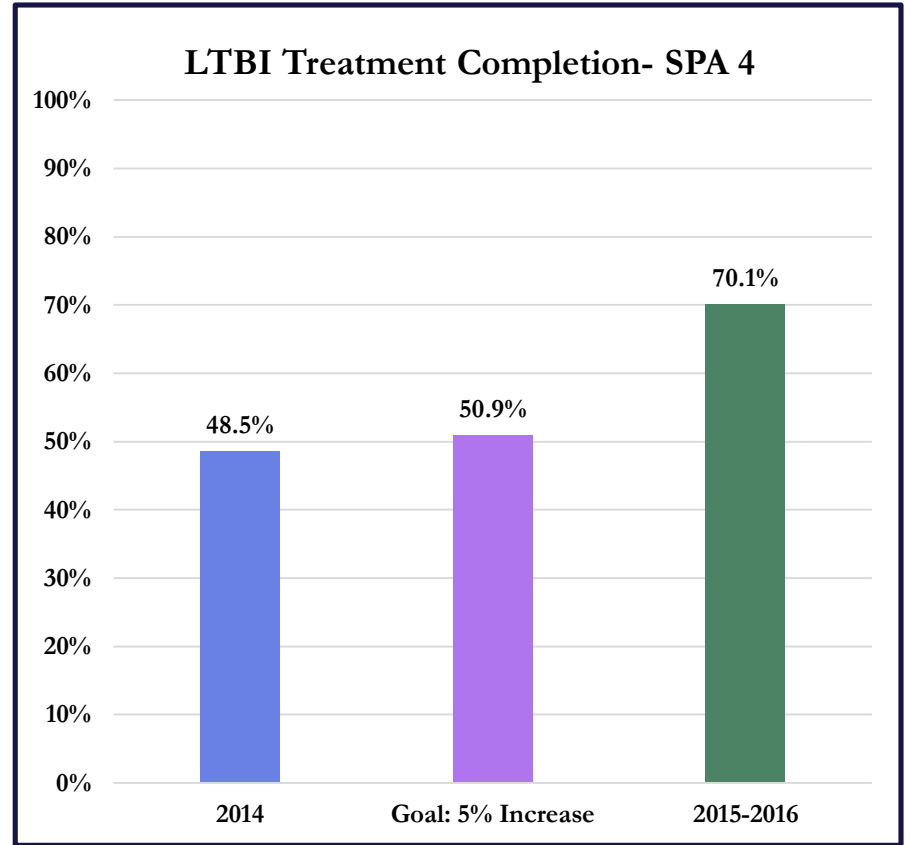
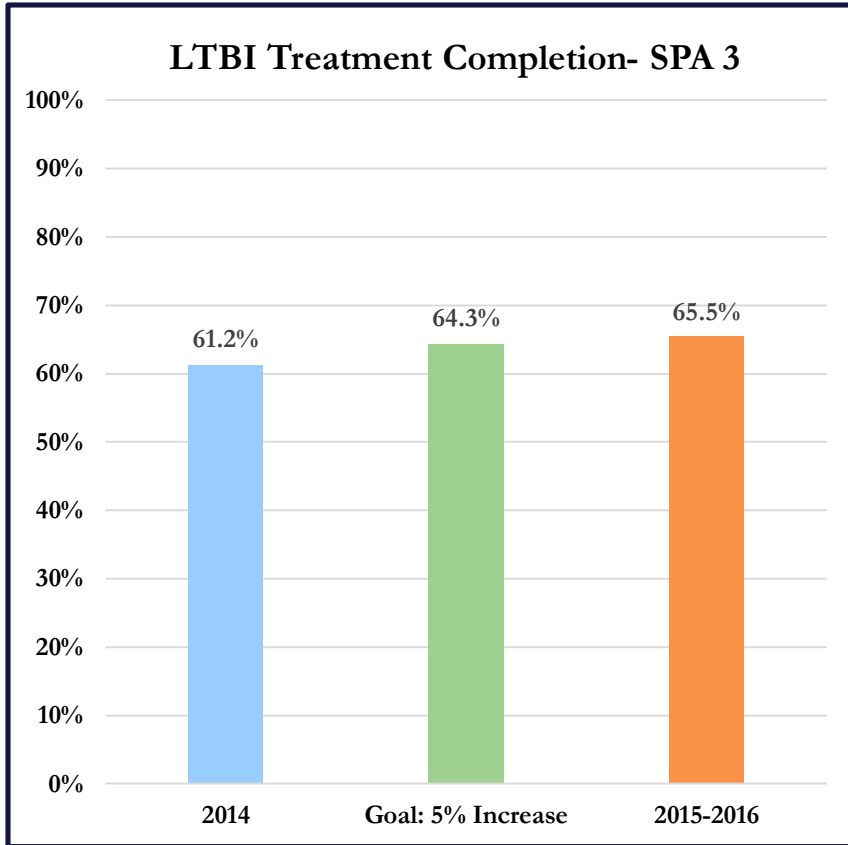
STUDY

Comparing 2013 Baseline to QI Project Result



STUDY

Comparing 2014 Baseline to QI Project Result



ACT- To Standardize or Not?

Based on the results of the Performance Improvement Project, SPA 3 & 4 clinics will continue to offer and promote short-term LTBI treatment (e.g., 3HP and Rifampin) to all eligible clients and clinic staff will continue to educate clients on the benefits of short-course therapy



PROGRAM NAME:	SPA 3 & 4
PROJECT TITLE:	Improvement of SPA 3 & 4 LTBI Completion Rate
DPH STRATEGIC GOAL/OBJ.:	Obj.2.2.c Assure that clinical preventive services provided by DPH are consistent with evidence-based recommendations and standards through use of continuous quality improvement.
PROJECT TIMELINE:	10/01/15 to 09/30/16
QI SPECIALIST:	Tiffany Romo and Lana Sklyar
EMAIL/PHONE NUMBER:	tromo@ph.lacounty.gov / (213) 250-8670 lsklyar@ph.lacounty.gov / (626) 256-1640

PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started

The Healthy People 2020 goal is to have a 79% completion rate of patients who start treatment for Latent TB Infection (LTBI); In SPA 3, the completion rate was 59% in 2013 and 61.2% in 2014. In SPA 4, the completion rate was 36% in 2013 48.5% in 2014.

2. Assemble the Team

A multidisciplinary Project Team was assembled from all four Health Centers in SPA 3 & 4. The team included representatives from the Business Office, Nursing, the Area Medical Director and Health Program Analysts.

3. Examine the Current Approach

The majority of LTBI patients were prescribed Isoniazid (INH) therapy (one pill per day) for 6-9 months. However, since LTBI treatment time varies and patients sometimes stop treatment and resume later due to adverse reactions, INH treatment may last up-to 12 months, reducing compliance. Also, there was not a systematic way to capture real-time data on LTBI treatment since treatment information was provided directly to TB Control Program for data entry and analysis.

4. Identify Potential Solutions

The main component of this project was to expand short-course LTBI therapy (e.g., 3HP and Rifampin) to patients who meet criteria (CHS Policy 509). 3HP would decrease the length of treatment time from 9 months to 12 weeks and Rifampin would decrease treatment to 4 months. In order to track treatment

completion in real-time, an LTBI Treatment Tracking Form was created for each health center to track all patients starting INH, 3HP and Rifampin during the project period. Lastly, the Project Team worked with management to ensure that the policy and eligibility criteria was reviewed with clinical staff and physicians.

5. Develop an Improvement Theory

By September 30, 2016, increase the percent of LTBI patients who complete treatment by 5%.

DO
Test the Theory for Improvement

6. Test the Theory

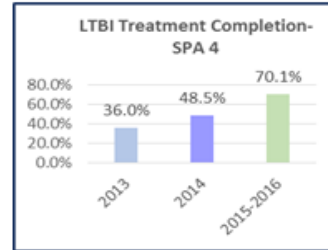
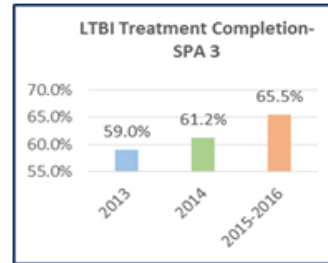
From 12/01/15 to 9/30/16, SPA 3 & 4 Health Centers offered short-course LTBI therapy to all eligible patients and tracked treatment completion and treatment refusal reasons. Staff submitted tracking forms every three months for the Project Team to review. If patients were noncompliant, staff provided additional education about the importance of LTBI treatment and followed up by phone with patients that broke or missed appointments.

CHECK
Use Data to Study Results of the Test

7. Check the Results

We exceeded our goal of increasing the percent of LTBI patients who complete treatment by 5%.

- SPA 3 had an **11%** increase from the 2013 rate and a **7%** increase from the 2014 rate.
- SPA 4 had a **94.7%** increase from the 2013 rate and a **44.5%** increase from the 2014 rate.



Some barriers identified to LTBI treatment included medication side effects and lost wages and/or inability to take time off work.

ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

SPA 3 & 4 clinics will continue to offer, promote, and educate about short-term LTBI treatment to all eligible patients.

9. Establish Future Plans

Based on barriers identified, future efforts may include expanding video Directly Observed Therapy (DOT) for patients that have trouble getting to the health center on a weekly basis.



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