

PROVINCE LEVEL MONITORING EVENT

ON

COMMUNITY-BASED TB CARE - DOTS

GUIDELINES



Draft: May, 2007

Prepared by

Tuberculosis Control Programme (PTP/NTP)
Association for Social Development (ASD)
Nuffield Institute for Health (NCIHD) UK

Supported by

Department for International Development (DFID)

CONTENTS

Contents	i
1. Background	1
2. Purpose and objectives	1
3. Outputs	2
4. Inter-district Review Meeting	4
5. Provincial Review Meeting	6
Appendices	
Appendices A: Templates for: (1 – 4) Presentation – DTC (A2, 4, 5) Presentation – PTP (A6) Recording – PTP	8

GUIDELINES
Provincial Level Monitoring Events:
(Draft: May 06, , 2007)

This document describes two related province level events. The District TB Coordinators present and contribute to a Inter-district Review Meeting. The Provincial TB manager presents summarized information at the following Provincial Review Meeting attended by the Executive District Officers (Health).

1. Background

The National TB Control Programme Pakistan (NTP) has now achieved countrywide DOTS coverage in 2005. The priority now is to enhance the quality of DOTS implementation. Enhanced supervision and monitoring is key to improved quality of implementation. The Programme already has regular quarterly monitoring meetings at district, province and national levels. At each level they carry out cohort analysis, and review and plan for the next quarter.

However, review of these meetings has shown that they lack standardized structure, guidelines and tools, and as a result do not achieve the desired outputs. The Provincial TB Control Programme Punjab and an NGO partner (ASD) have developed this more structured format for the province level monitoring of TB control activities. These guidelines and tools will be evaluated and revised through piloting in the province of Punjab, before being considered for other parts of the country. The provincial health department has found the provincial review meeting useful for more than TB, and is now including other programme and general health systems issues in the meeting. From the TB programme point of view, this is welcomed and is in line with the TB and health systems strengthening component of the national and international (WHO) Stop TB strategy.

The objectives and outputs for the monitoring process (including both meetings) are outlined. Then in section 4 the details of the inter-district review meeting and in section 5 the details of provincial review meeting are described. The tools for making presentations and taking notes are given in Appendix-A.

2. Purpose and Objectives

2.1 The **aim** is to improve the case finding and treatment outcomes in a province. The **purpose** is to improve technical and management support to the districts through provincial level events. These will build on district level monitoring activities, as well as contribute to the national level monitoring activities.

2.2 The **objectives** are:

- To check and compile the quarterly case management data from each district, and prepare provincial quarterly reports (i.e. TB07, TB08 and TB09).
- To review the case finding and treatment outcomes, resource availability, and implementation gaps in each district, and to discuss the corrective actions required.
-

- To review the External Quality Assurance (EQA) related activities and challenges in the province, and plan actions accordingly.
- To summarize the provincial situation and agreed actions onto the summary performance indicator sheet, and share this with the National TB Control Programme.

3. **Outputs**

The outputs of the inter-district review meeting includes:

3.1 Compiled district quarterly case finding and treatment outcome reports (TB07, TB08 and TB09).

3.2 The DOTS implementation situation reviewed and progress, gaps and plans recorded for each district.

3.3 Summary of district performance indicators for the whole province prepared.

3.4 Capacity building on specific issues and developments.

The outputs of the provincial review meeting includes:

3.5 Trends in case finding and treatment outcomes and key issues for each district reviewed, and actions agreed.

3.6 The performance of laboratory EQA and key programme issues in the province reviewed and actions agreed.

How the monitoring events at various levels are related

The outputs from one meeting are the main inputs of the higher-level meeting, as shown in the table below. The diagnostic facility data is used in the intra-district meeting. The outputs of this intra district meeting become the inputs for the provincial review meetings. Similarly the outputs of the provincial meeting inform the national meeting.

Table: TB-DOTS Monitoring Events - Linkages

Level	Inputs	Outputs
Diagnostic Facility	<p><u>Human:</u> DTC, DLS, MO, DOTS Facilitator, Lab. person,</p> <p><u>Tools/Records:</u> TB01, TB03, TB04, Monitoring record, EQA tools.</p>	<ol style="list-style-type: none"> 1. TB01 and TB03 updated 2. Gaps in materials and case management practices identified, and actions agreed/taken. 3. EQA done and records maintained. 4. Facility monitoring record completed and filed.
District	<p><u>Human:</u> EDO, DTC, MO, DOTS Facilitator, (NPO)</p> <p><u>Tools/Records:</u> TB01, TB03, TB04</p> <p>Facility presentations (informed by facility records and monitoring records)</p> <p>DLS presentation (basis: EQA record)</p>	<ol style="list-style-type: none"> 1. TB07, TB08, TB09 for diagnostic centers and district. 2. District gaps/action note and summary performance indicator (sheet) 3. DTC report/presentation (based on facility and district records) includes: (Cohort analysis, trend analysis, EQA summary, district progress and challenges).
Province	<p><u>Human:</u> DTC, EDO, PRL staff, (NPO), PTP staff</p> <p><u>Tools/Records:</u> TB07, TB08, TB09</p> <p>District summary performance indicators (sheet).</p> <p>DTC report/presentation (includes: (Cohort analysis, trend analysis, EQA summary, progress and challenges)</p>	<p><u>Inter district:</u></p> <ol style="list-style-type: none"> 1 Compiled quarterly case finding and treatment outcome reports (TB07, TB08 and TB09). 2 The DOTS implementation situation reviewed and progress, gaps and plans recorded for each district. 3 Summary of district performance indicators for the whole province prepared. 4 Capacity building on specific issues and developments. <p><u>Province:</u></p> <ol style="list-style-type: none"> 5 Trends in case finding and treatment outcomes and key issues for each district reviewed, and actions agreed. 6 The performance of laboratory EQA and key programme issues in the province reviewed and actions agreed.
National	<p><u>Human:</u></p> <p><u>Tools/records</u> TB07, TB08, TB09 (district)</p> <p>Summary of district performance indicators.</p> <p>Trend from provincial TB07, TB08, TB09 and issues from provincial activities and meeting.</p>	<ol style="list-style-type: none"> 1. National DOTS trend and progress on each province reviewed. 2. Plans in each province reviewed, and suggestions made. 3. Orient on specific issues and developments. 4. NTP presentation to the Secretary Health, and key messages given to each province. 5. NTP report to MoH, partners and EMRO.

4. Inter-district Review Meeting

Inter-district review meeting is the first of the two related events, where the District TB Coordinators review the case finding and outcome data, along with issues/gaps and proposed actions for their districts.

Preparations:

Logistic preparations:

- 4.1 The province arranges the one-day meeting, at a date and venue agreed in consultation with the districts and national TB control programme. District TB Coordinators from all the districts attend the meeting, which is facilitated by the PTP staff.
- 4.2 The province arranges a venue with rooms for two or more groups of about 10 - 15 persons each, so as to enable active participation, depending on the provincial facilitators available. Audio-visual equipment (i.e. transparency projector) is required in each room, with a computer technician to assist participants in compiling/finalizing their presentations.
- 4.3 The PTP Manager is overall supervisor of the quarterly inter-district review meeting. One programme person facilitates each group of the DTC participants, and one provincial reference laboratory also participates. The PTP Manager may invite other provincial health programme or partner representatives as required.
- 4.4 The Provincial TB Control Programme arranges the venue, projector, transparencies, calculator and logistic arrangements e.g. accommodation, local travel, refreshments.

Technical preparations:

- 4.5 Each District TB Coordinator (DTC) submits to the PTP the required reports, prepared during their respective intra-district meetings. The reports submitted are:
 - a) district summary performance indicators sheet, which summarizes, by diagnostic center, the key *findings* and the main *actions* agreed for each diagnostic center,
 - b) a copy of four slides presented by DTC in the respective intra-district meeting that also includes summary AFB quality control activities in the district, and
 - c) a copy of quarterly reports for the quarter due to be reported: TB07 (case finding report), TB08 (smear conversion report), and TB09 (treatment outcome report). The three reports refer to cohorts of TB patients registered during three different quarters, as shown below.

Quarterly report	Quarter to be reported
Case Finding (TB07)	Cases registered during the quarter just completed e.g. In July 2007, the registrations of April – June 2007 are reported.
Smear conversion (TB08)	Cases registered during the previous quarter e.g. In July 2007, the registrations of January – March 2007 are reported.
Treatment outcomes (TB09)	Cases registered during the same months as for the case finding, BUT for the previous year e.g. In July 2007, the registrations of April – June 2006 are reported.

- 4.6 The PTP group facilitators review the following, before the inter-district meeting, from each district in their respective group:
- a) three quarterly reports, to check its completeness and to tally the entries with the previous reports (i.e. current smear conversion and treatment outcome reports compared with previous case finding report for the relevant quarter). Any missing patients or discrepancy are noted, discussed and rectified, when DTC comes for inter-district meeting. The data from these reports are then entered into the computer.
 - b) summary performance indicators sheets and four slides are also reviewed to assess the overall performance as well as the functioning of each diagnostic center in the district. The recorded challenges being faced and suggested actions are also reviewed for technical appropriateness and managerial feasibility.

Conduct

The inter-district review meeting can be divided into three main sessions i.e. data compiling, data reviewing, and capacity building.

Session 1: Data Compiling

The districts are expected to send their compiled data, an output from their intra-district meeting, to the provincial programme before the inter-district meeting is held. However, an hour and a half session is kept to assist the District TB Coordinators to:

- a) complete and/or elaborate on the compiled district data submitted earlier
- b) check the computerized programme records for their respective district.
- c) finalize their respective slides for presentation and discussion in the inter-district meeting.

Session 2: Data Review

The duration of this session may range between two and a half hours to three hours, depending upon the number of participants in each group.

- 4.7 Each **DTC** presents summaries of the overall performance of TB-DOTS implementation for his/her district. The DTC presentation includes:
- a) cohort analysis table for the district (Appendix-A1),
 - b) trends analysis graph for the current quarter and the previous three quarters (Appendix-A2),
 - c) summary of laboratory network functioning during the quarter (Appendix-A3),
 - d) progress on the actions agreed during the last quarterly meeting, and challenges currently being faced in the district and options for action (Appendix-A4),

The DTC presentation is the same as prepared and used in the intra-district meeting of that quarter (the preparation of which is described in district level monitoring guidelines). While the laboratory network functioning summary is extracted from the DLS presentation of the intra-district meeting and from the summary performance

indicators sheet for the district. The explanatory notes (if used) help participants to keep these presentations to be complete but focused and concise.

- 4.8 At the completion of each district presentation, the facilitator invites **comments** from the National Programme Officer (NPO) and PRL staff.

The NPO may draw knowledge from the facility monitoring record (if any), district summary performance indicators sheet, the previous inter-district quarterly meeting record, and the data being presented by the district. The NPO comments may cover any key aspects of DOTS implementation in the district:

- ❑ Cohort analysis – commenting on indicators that are outside the anticipated range, with suggestions on the possible cause of (see the table in the district level meeting guidelines)
- ❑ Trend analysis – commenting on relative progress or decline over time and his/her understanding of reasons, and suggestions
- ❑ Progress on actions agreed during last meeting, challenges currently being faced and options being proposed.

The PRL staff comments draw on knowledge from the report and discordant slides received from the district as well as quarterly interaction between PRL staff and DLS of respective district. The PRL staff may comment on the presented summary of laboratory network functioning, his/her knowledge of the quality of the AFB testing being done in the district, and any key challenges and suggestions.

- 4.9 Other **participants**, with the permission of the facilitator, may ask the presenter or the NPO to clarify or elaborate on certain specific information or actions.

- 4.10 The **facilitator**, in light of presentation and subsequent comments and discussion, guide the participants to an agreed priority actions for the next quarter. A designated programme staff notes the main gaps and agreed **actions** for each district on “action note” sheet (Appendix-A6).

Session 3: Capacity building

This session would focus on an identified capacity gap in the districts. The programme staff, with help of partners, would design and conduct these capacity building events. These events may include activities such as brainstorming and strategy reviewing, intervention planning, designing an operational research, preparing and sharing the case studies, etc. The duration of a typical capacity building session would be an hour and a half.

5. Provincial Review Meeting

The provincial review meeting follows the inter-district review meeting. The provincial TB manager presents summarized information to the Executive District Officers (Health), in presence of the provincial secretary health, provincial DG health, and an NTP representative.

Preparations:

- 5.1 This quarterly one-day meeting is held at the provincial directorate or secretariat level, facilitated by the PTP. The room should have a flexible sitting arrangement for about forty people (according to the number of district EDOs invited). Audio-visual equipment such as transparency or multi-media projector is required.
- 5.2 The province schedules the meeting in consultation with the provincial health secretary and national TB control programme. The Secretary Health chairs the meeting, attended by the Director General Health, and other programme managers or partners from the province.
- 5.3 Provincial TB Control Programme invites the participants and makes the programmatic and logistic preparations for the meeting. These include the projector, transparencies and calculator as well as accommodation, local travel, refreshments etc.

Conduct

- 5.4 This meeting is to inform the Secretary Health and EDOs about the performance and required actions in the province.
- 5.5 The PTP Manager presents on the performance and required actions, based on the proceedings of the intra and inter district review meetings. The presentation includes a trends graph and a few key comments for each district, a province wide summary of the laboratory functioning as below:

The trends analysis graph for each district shows performance on four key programme indicators; the current quarter and the previous three quarters (Appendix-A2). The Programme manager adds key observations and required actions, for no more than 2 minutes per district.

As required the DG Health or the chair may interrupt the presentation, inviting the relevant EDO for brief comments (one-minute) on significant information about his/her district. Then the **chair**, in the light of comments/discussion, guides the participants to an agreed action for the identified implementation gaps. After this, the PTP manager presents a summary of the EQA in the province. This includes the **laboratory** functioning and support activities of the provincial programme and the reference laboratory. The data is extracted with PRL staff assistance from their EQA records and the district presentations in the inter-district meetings.

Important management and development achievements made and challenges faced by the provincial TB control programme are discussed. The chair may invite the participants to comment, and then guides the participants towards agreed action to overcome current challenges.

A programme staff member notes the proceedings and agreed **actions** for TB program, and other health systems issues on the “action note” sheet (Appendix-A6)

COHORT ANALYSIS

Case finding - patients registered in quarter 2 (Apr. – Jun.) Year 2007

Suspect screening			Registration (TB 03)					S ⁺ Case detection rate (NSS ⁺ x 4 x 100/ pop x 0.0008)	
			Number of patients registered				Smear Negative		Extra- pulmonary
			Smear Positive		New	Retreatment (CAT2)			
# OPD	TB suspects								
	#	% of OPD							

Smear conversion - patient registered in quarter 1 (Jan. – Mar.) Year 2006

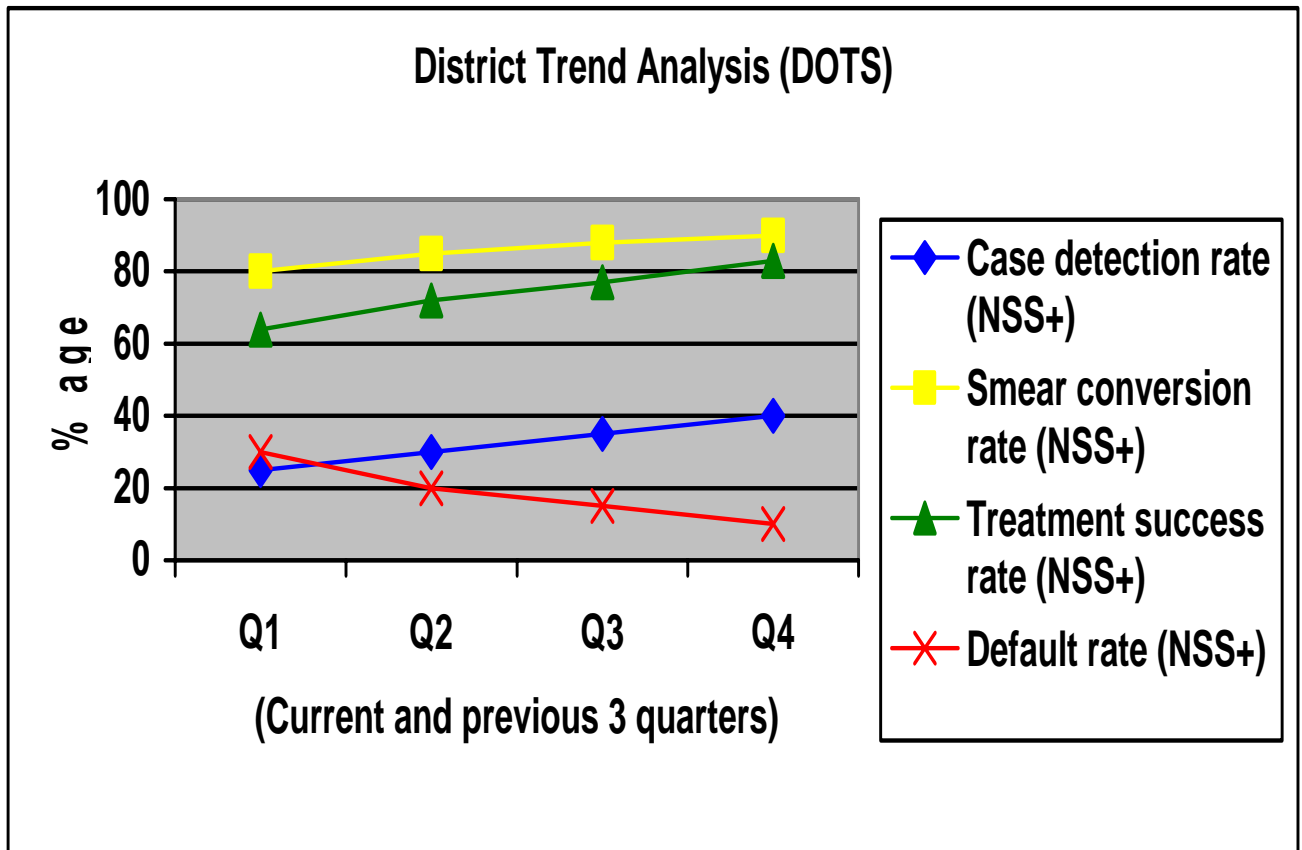
Patient Type	# Registered	At completion of 2/3 months				Remarks
		Conversion		Default (early)		
		#	%	#	%	
NSS ⁺						

Treatment outcome - patient registered in quarter 2 (Apr. – Jun.), Year 2006

Patient Type	# Registered	Successful			Unsuccessful			Transfer out
		Cure	Complete	Total	Died	Failure	Default	
NSS ⁺								
Retreatment (CAT- 2)								
NSS ⁻								

District Trend Analysis (DOTS)

(An example)



Notes (for graph preparation)

Graph	X – Axis	Y – Axis
Yellow line	Quarter under reporting and the previous three quarters	Case detection rate (All)
Blue line		Case detection rate (NSS+)
Red line		Early default rate (NSS ⁺)
Green line		Treatment success rate (NSS ⁺)

SUMMARY LABORATORY FUNCTIONING

DISTRICT (Name)

Quarter: (_____, 2007)

Consideration	Observation
Total number of diagnostic centers in the district	
EQA ACTIVITIES	
Average number of DLS visits per facility	
Total number of slides cross-examined	
Percent (%) slides found discordant	
RESOURCE GAPS	
Skilled staff	
Material resources	

PROGRESS MADE AND CHALLENGES BEING FACED

Previous Decisions	Progress
<p><u>Technical</u></p> <p><u>Managerial</u></p>	
Current Challenges	Option(s) for consideration
<p><u>Technical</u></p> <p><u>Managerial</u></p>	

LABORATORY FUNCTIONING
PROVINCIAL SUMMARY

Quarter: (_____, 2007)

Consideration	Observation
EQA INPUTS (during the quarter)	
Number districts provided material support for laboratory working	
Number DLS trained during the quarter	
Number laboratory workers trained	
Number districts visited by PRL staff for EQA support	
Number of DLS attended PRL event	
EQA ACTIVITIES (during the quarter)	
Number of districts where DLS performed EQA, as per guidelines.	
Total number of slides cross-examined by DLS in all districts	
Percent (%) reexamined slides found discordant in all districts	
CHALLENGES	
Human and material resources	
Others	

QUATERLY INTER-DISTRICT REVIEW MEETING: Province _____, Date: _____

ACTION NOTES (PTP)

District	Main Gaps	Agreed Action	Responsible	Dead line	Remarks
EQA in the province					

Case finding – Analysis and Action Guide

Indicator	Acceptable range	If less than acceptable		If more than acceptable	
		Reasons	Actions	Reasons	Actions
% TB suspects among OPD	2 – 5%	<ul style="list-style-type: none"> - Suspect identification not correct at DCs in the district - DC laboratories do not entertain all suspects 	<ul style="list-style-type: none"> - Train/ instruct the doctor - Modify the functioning of DC laboratories. 	<ul style="list-style-type: none"> - Doctor incorrect practice 	<ul style="list-style-type: none"> - Train/ instruct doctors to follow NTP guidelines
% NSS ⁺ among TB suspects examined	8 – 12%	<ul style="list-style-type: none"> - Poor quality of AFB testing at DCs. - Pre-registration default - Excessive suspect referral 	<ul style="list-style-type: none"> - Check the EQA record & strengthen the EQA - Improve retrieval of pre-register defaults - Instruct doctors at DCs to follow NTP guidelines 	<ul style="list-style-type: none"> - Poor quality of AFB testing - Only highly probable cases are referred for AFB testing. 	<ul style="list-style-type: none"> - Strengthen the EQA - Train/ instruct doctors to follow NTP guidelines
% NSS ⁺ among all new patients of pulmonary TB.	40 – 60%	<ul style="list-style-type: none"> - Poor quality of AFB testing at DCs. - Diagnosis of smear-negative patients incorrect 	<ul style="list-style-type: none"> - Strengthen the EQA - Train/ instruct doctors to follow NTP guidelines 	<ul style="list-style-type: none"> - Poor quality of AFB testing (FP) - NTP criteria to diagnose smear-negative cases are not followed. 	<ul style="list-style-type: none"> - Strengthen the EQA - Train/ instruct doctors to follow NTP guidelines
% re-treatment (CAT-II) cases among total smear-positive registered	10 – 20%	<ul style="list-style-type: none"> - Diagnosis practice at DC not correct. 	<ul style="list-style-type: none"> - Train/ instruct DC doctors to follow NTP guidelines 	<ul style="list-style-type: none"> - Diagnosis practice at DCs not correct. - High default of new cases in the district 	<ul style="list-style-type: none"> - Train/ instruct doctors - Improve default rate through better support & retrieval.
Case detection rate (NSS ⁺ detected out of estimated cases in catchment pop.).	70%	<ul style="list-style-type: none"> - Low suspect identified/ examined at DCs - Poor quality of AFB testing. - Poor referral from TC and/or utilization by clients. 	<ul style="list-style-type: none"> - Train/ instruct doctors - Strengthen the EQA - Strengthen the referral from TC and/or community mobilization 	<ul style="list-style-type: none"> - NTP guideline is not followed. - Patients coming from other areas. 	<ul style="list-style-type: none"> - Train/ instruct doctors - Pre-registration transfer out, where arrangements in place.

Treatment Outcomes – Analysis and Action Guide

Indicator	Acceptable range	If less than acceptable		If more than acceptable	
		Reasons	Actions	Reasons	Actions
% new smear-positive cases found converted at completion of 2/3 months.	80 – 90%	<p>1. Patients don't attend (default, died, transfer)</p> <p>2. Patients attend but smears not done.</p> <p>3. Smears done but conversion low due to:</p> <p>3a) Inadequate treatment</p> <p>3b) Low patient compliance</p> <p>3c) Poor quality of AFB testing</p>	<p>1. Improve retrieval of defaults or reduce post-registration transfer</p> <p>2. Train/ instruct doctors & lab. staff</p> <p>3a) Train/ instruct doctors</p> <p>3b) Improve patient support arrangements.</p> <p>3c) Strengthen the EQA</p>	<p>- High patient compliance</p> <p>- Poor quality of AFB testing</p>	<p>- Encourage the staff.</p> <p>- Strengthen the EQA</p>
% NSS ⁺ treated successfully	85+%	<p>High</p> <p>- Defaulters</p> <p>- Rx. failure</p> <p>- Patient deaths</p>	<p>Strengthen the: -</p> <p>- communication/ education given</p> <p>- Rx. support and defaulter retrieval</p> <p>Improve patient classification, prescription and compliance.</p>	- Reporting errors	- Review and exclude/rectify the reporting errors.
% NSS ⁺ declared cured among successfully treated patients.	70 – 80+%	- Follow-up AFB testing not being done as per guidelines.	- Train/ instruct doctors and lab. staff to follow NTP guidelines	<p>- Reporting error</p> <p>- Extra-ordinary AFB follow-up testing practices.</p>	<p>- Review and exclude/rectify the reporting errors.</p> <p>- Acknowledge the good work.</p>
% TB patients defaulted.	5 %	<p>- Reporting errors at DCs (defaulters are classified as transferred out etc.)</p> <p>- Extra-ordinary case management work at DCs</p>	<p>- Review and exclude/rectify the reporting errors by DCs.</p> <p>- Acknowledge the good work by DCs.</p>	<p>- Poor communication/ information given</p> <p>- Poor treatment support</p> <p>- Poor retrieval arrangements</p> <p>- Poor perceived quality of care</p>	<p>- Improve provider-patient interaction</p> <p>- Improve Rx. support</p> <p>- Enhance retrieval arrangements</p> <p>- Understand/ address the perceived quality of care issues.</p>

LIST: PROVINCIAL INPUTS FOR THE NATIONAL LEVEL MEETING

1. TB07, TB08, TB09 for the province
2. Province summary - performance indicators
3. Slides:
 - i. Cohort analysis slide
 - ii. Trend analysis slide
 - iii. Provincial summary – Laboratory EQA functioning
 - iv. Progress made and challenges being faced in the province

PROVINCE SUMMARY - PERFORMANCE INDICATORS (Quarter Jan. – Mar., 2007)

District	REVIEW COMMENTS												Agreed Actions	
	Staff	Material	Case Finding						Conversion (NSS ⁺)		Treatment Outcome (NSS ⁺)			
			# OPD	# Suspect	# NSS ⁺	# NSS ⁻	# CAT-II	CDR NSS ⁺	CR	EDR	TSR	DR		TOR