

Wave 10 Quarterly Narrative Report

TB Preventive Treatment Projects

Project Information	
TB REACH Project Short Code	10429
Grantee organization	Rede Brasileira de Pesquisa em Tuberculose, Rede TB
Country	Brazil
Report Period	01-04-23 to 30-06-23

Activities

- 1. Describe the activities that were implemented this quarter.**
- How are you reaching out to and identifying persons with TB infection and diagnosing persons with active TB who are excluded from TPT?
 - Are you using any tests for infection this quarter?
 - What treatment regimens are you using?
(indicate if and when there were changes in the test or treatment regimen used?)

Virtual training activities:

The project activities started 2023Q2. The main activities in this quarter were the virtual training sessions, which started on April 10th. Together with the NTP, we provided 14 120–150 minute-sessions to 1451 higher-education healthcare workers (HCW) in Q2, of whom 272 were medical doctors, 1002 were registered nurses and 177 were registered pharmacist. Of those, 447 were from São Paulo, 207 from Rio de Janeiro, 399 from Manaus, 222 from Porto Alegre and 176 from Recife. In general, sessions were for a specific city personnel (although we did allow HCW from other cities to attend if they missed their city training session) and the municipal TB manager and other management representatives were present. Community advisory board (CAB) members also participated in all sessions.

These sessions were adapted overtime (current version available at <https://docs.google.com/presentation/d/1Z41NOrOuwc8MA5F8ze8fjppMVVWeMvdWO/edit?usp=sharing&ouid=102944331555646687031&rtpof=true&sd=true>) and consisted of an introduction with sensitization for the importance of contact investigation and TPT completion when indicated, the cascade-of-care approach to identification of contacts, TB infection (TBI) diagnosis, TB disease (TBD) exclusion, TB regimens and management of side effects, and notification according to the national guidelines, with a few adaptations for this project: TST to be placed in the first visit regardless of symptoms (as per the WHO handbook on TBI tests), TST reading to be scheduled for 48h after the injection of PPD. 3HP is the regimen of choice After 90 minutes of lectures, a Q & A session followed. In general, there were many compliments from HCW, who were surprisingly grateful for this simple training session. Their perception is summarized in the GMS HSS annex 1 (perception of HCW).

In addition, we virtually trained 2576 community health workers (CHW, “agentes comunitários de saúde – ACS”), of whom 1281 from São Paulo, 249 from Rio de Janeiro, 479 from Manaus, 272 from Porto Alegre and 295 from Recife. Their training was focused mainly on identification of the contacts and the need for encouraging them to present to the clinic for a check-up (latest version available at https://docs.google.com/presentation/d/1mPY53Gs1x3-wVg-Fk_e3d3nVAxPCW8ev/edit?usp=sharing&ouid=102944331555646687031&rtpof=true&sd=true). They were given a general view of what this check-up consists of and why this is important. In the first session we understood that we needed to use very simple words and concepts, and changed substantially the presentation. These virtual sessions were very lively, with many questions and reports about their difficulties, and discussions. They also manifested gratitude for the training, some of their quotes are transcribed in annex 1. The satisfaction survey showed that 97.2% claim to have acquired new knowledge, 88,7% consider that the

virtual training addressed topics that will be important in your professional routine and 88.0% would like more similar sessions (annex 1).

Finally, we trained 274 trainers for the new registry book: 115 from São Paulo, 26 from Rio de Janeiro, 103 from Manaus and 30 from Recife. The training material and pictures is available at https://drive.google.com/drive/folders/1YDIQjlx_bdi-nOGmM54Bkn39GmF6g-3O?usp=drive_link.

Training for PPD injection and reaction reading, planned for Q2, had to be postponed, hopefully to Q3 (see ahead shortage of PPD in the country). However, some initial training activities were started in Manaus with the mTST (pictures available at https://drive.google.com/drive/folders/1rt_euMo2on7Bp7Oy-6Tn_EV93glL1C4g?usp=drive_link), the simplified protocol with sausages and the use of silicone arms, procured by the ExpandTPT project. Caliper rules for TST reading (with the project logo) were produced and distributed to the 5 cities. We also acquired silicone arm models with different sizes of “induration” for training purposes.

Tests and treatment:

The Brazilian NTP recommends TST for all contacts of any age, except for those who live with HIV (they should be treated if exposed regardless of TST and of CD4 level), newborn co-habitant of an index patient, those with a previous documented positive TST or with a history of TPT or TBD treatment in the past. PLHIV with CD4 \leq 350/mm³ should also be treated without testing, regardless of contact.

We did use TST in the beginning of the quarter, but by the end of Q2 very few vials remained in the country, procurement was placed by the NTP earlier this year, provision which was expected to June is now postponed to August, a substantial bottleneck for our project. The shortage of PPD also delayed the training for TST, a crucial part of the project to capillarize the access to this test. Chest X-ray is also mandatory for all before TPT. The project does not intend to change the national recommendations, training follows the guidelines (with the very minor exceptions described above). However, during technical visits from the project with the NTP to the cities, we understood that some cities or services do not have the necessary organization for the ideal cascade of care. The NTP recommended the WHO-strategy (treat without testing if testing unavailable) to the municipal managers in this case.

3HP is the treatment of choice, it has been progressively scaled up in the 5 cities of the project, from 46.43% in Q1 to 51.43% in Q2. There is still room for substantial improvement, as this is the treatment of choice for contacts over 10 years of age.

However, the number of TPT dropped substantially in all cities due to the shortage of PPD. See 2b for mitigation strategies.

NTP/Rede-TB technical visits to the 5 cities:

We conducted 14 meetings of the project personnel. This personnel includes focal points from the municipal TB management of each city. During these meetings and even during the training sessions, we perceived the resistance of some state and municipal managers to small changes in their routine. For example, 100 TST readings (induration different from zero) are necessary to certify a HCW for this task in São Paulo. TST is offered only once a week in many clinics, by appointment, and reading is 72h later (which increases the chance for missed opportunity of catching up with those who eventually do not return on the scheduled date). In Recife, TST and chest X-ray are “regulated” (an administrative process for complex procedures or specialized consultations). From previous work (the ACT-4 study, in which we based our ExpandTPT program), we know that besides training, service reorganization and full involvement of stakeholders are crucial, so we scheduled technical visits to better understand the routine and to discuss with the state and municipal managers. The first visit took place in São Paulo at the end of Q2, 27 and 28 June. The visit consisted of a general discussion with the key stakeholders (they differ from city to city), visits to 2 clinics and internal discussions with municipal and state managers about the bottlenecks and the way forward. The full report (prepared by the municipal TB programme) is available at https://drive.google.com/file/d/1GwURzUyPooUQ5NRAAO1v4XBQexFyWt8x/view?usp=drive_link. As a result of this specific visit to in São Paulo, a new local guideline document is being drafted, and we have now São Paulo’s TB management team very committed with the ExpandTPT program and the need to scale up TPT. Visits to the other 4 cities are ongoing in Q3.

Main conclusions were:

- Need for further decentralization of TBI/TPT activities
- Prioritize, for technical visits, regions with more TB and TBI cases and less TPT notified
- Further training sessions together with the ExpandTPT project (occurred 10 and 14 July)
- 11 additional labs offering IGRA
- Reopening of 82 TST reference units that were closed during PPD shortage
- Mapping of HCW certified for TST application and reading/ ExpandTPT will offer additional training where needed
- More PPD will be available (50% increase) in SP
- TST to be offered in the first visit and to all, including those with symptoms
- Schedule of reading of TST 48h after application, to allow recall if missed consultation
- The Municipal Health Secretariat informs that it is in contact with Primary Care for developing a protocol that will define the actions of each professional in recommending the diagnosis and treatment of TB and LTBI. They will consider professional recommendations from class councils (meaning that nurses will be officially allowed to recommend tests and prescribe TPT).
- The Municipal Health Secretariat will articulate with the relevant third parties to increase HCW awareness of the importance of scaling up TPT in contacts and homeless.

CAB activities:

A specific/dedicated national CAB for the ExpandTPT program was created in Brazil. It is composed by 14 members from the 5 cities of the program/study, and has substantially performed since April 2023. CAB members have reviewed the protocol and other study/program instruments, such as information for clients (prospective participants of the TPT program). They also participated in all capacity building, training and meeting sessions, as well as interacted with local governments and community constituencies. Moreover, CAB members developed a specific material (guide) to the CHW. This educational material has been based in the original one produced to the HCW. They have also interacted directly with CHW for the development of the dedicated material. CAB members have reported on their activities on a regular basis with their views, perceptions, remarks and provided important suggestions to the trainings; finally, they have been bridging the communication between communities and the services. See details in section 10.

Information system:

The municipal health secretariat intelligence department in Manaus is developing an integrated information system that gathers information from the electronic medical records, the TB information system (Sinan) and the lab system (GAL). With the support of the project, they have developed a module for contacts (more details will be given on our interactions during Q3). They have presented their system to the NTP surveillance managers, who also engaged with the development of the system.

Other activities:

Based on the experience with the ExpandTPT project, Rede-TB was invited by the NTP to train nurses nationwide as a new agreement with the Federal Nursing Council allows registered nurses to request tests and prescribe TPT.

We identified 5 clinics to implement an inhouse CAD, technical visits and service arrangements are expected to Q3 and field implementation to Q4. The distribution of the educational material was also delayed as the proof sent by the printer was unacceptable (small fonts, heavy cards and other problems).

Overall, the activities are contributing to the strengthening of the health system, but unfortunately, despite the successful accomplishment of all these planned and additional non-planned activities, the indicators do not show improvements of TPT, very likely because of the shortage of PPD, as reported below.

Implementation (Operational) Success and Challenges

- 2. a. Describe any operational successes or challenges you had implementing your TPT program.**
- How have you built health care worker capacity for identifying persons with infection and providing TPT?
 - Were there any concerns for program staff or health care workers providing the services?
 - Were there any notable benefits or challenges for persons screened, tested, or treated?
 - Describe any procurement challenges or successes?
 - Is TPT adequately recorded and reported in your evaluation population?
- b. How has the project adjusted to maximize these successes and mitigate the challenges described in 2a above?**

So far, we have trained CHW to identify contacts and HCW in the whole management of the TBI cascade of care. This includes definition of a household contact (HHC) – not necessarily resident in the same household, and extension of the concept to close contacts, not necessarily in the household.

We are reorganizing services to offer TST daily (except Thursdays in services that do not open on Saturdays), to improve access, to schedule reading to 48 hours later, to reduce losses. We plan to train at least 300 HCW on PPD injection and reaction reading in the country to improve access to TST. Our main challenge currently is the shortage of the consumable. Because of PPD shortage, less contacts were tested and less TPT were prescribed.

In Q3, we have started a round of training sessions on the guidelines (NTP technical note) about how to proceed in the absence of PPD (i.e., offer IGRA to children 2-10 years old and PLHIV, and offer TPT without testing to children 0-2 and 11-15 or to all PLHIV and children who do not have access to IGRA tests for any reason). We are considering a one-week tolerance to test with IGRA, if not available, treat without testing (but Chest X-ray mandatory for all). Training available at <https://docs.google.com/presentation/d/1UsFnBuFWmiXM4V26ZOhPAytjZldqM6Yu/edit?usp=sharing&ouid=102944331555646687031&rtpof=true&sd=true>. Specific technical notes from the municipal programs are being released to deal with the local difficulties.

Outcomes and Impact

3. Did activities result in the identification of persons with active TB disease and TB infection?

- Did the activities result in TPT initiation and completion for those with TB infection?
- What interventions are being done to improve TPT initiation and completion?
- How are persons on TPT being supported and assessed for adherence and side effects?

We do not have information available on identification of contacts, testing and diagnosis of TBI and TBD. We will have this type of information (regarding Q1-Q3) in Q3, as the registry books will be completed.

The number of TPT decreased slightly in Q2. We would have expected a higher decrease, due to the shortage of PPD and to the expected notification delay. We are hoping this means that training is effective and we could expect more TPT prescription when PPD is available and more HCW are trained for TST application and reading. Drop of notifications was observed in contacts, not in PLH, corroborating our hypothesis (IGRA is available in most cities for PLH, and many do not need any testing for TBI before treating).

It is still too early to comment on the proportion of completed treatments (even more delayed notification). We expect (from local data from the city TB programmes and the overall national IL-TB system) that the proportion of TPT completed will increase, due to more prescription of the shorter and safer regimen 3HP.

4. Describe how the numbers of persons across the cascades- those identified with active TB, TB infection, who initiated, and/or completed TPT- have changed in your evaluation population since the beginning of your activities (data from GMS tables)

- How do these numbers compare to your control areas?

We observed a decrease in the number of TPT prescriptions both in intervention (18.47%) and control (8.21%) cities in Q2, compared to Q1 2023. The drop is more accentuated in the intervention cities, this may be due to a more impactful delay in notification in the 5 intervention cities, which have a more complex system, with more primary care units. Interestingly, there was a slight increase in the notifications of TPT for PLHIV. This may be because (1) PLHIV can be tested with IGRA; (2) Some subpopulations of PLHIV do not need any testing ($CD4 \leq 350/mm^3$ or exposure to an index case). We will follow those indicators closely in Q3.

5. In the next quarter, what will the project do differently to improve / maintain impact?

We hope PPD will be available (the consumable has arrived in Brazil, now comes distribution). We have enrolled to the Indian Serum Institute Cy-TB donation program of TB REACH W10 projects (but we may have problems for importing, as Cy-TB is not pre-qualified by WHO). If importation is successful, this will allow of course more testing in Q4, but we also intend to train 300 HCW for TST, to improve access to the test, as currently testing is concentrated in a few clinics. Access will also be improved by the offer of PPD to more clinics. Currently, the NTP recommends distribution of PPD only to clinics that use at least 12 out of 15 doses in the vial. For the project, we are piloting (and will conduct cost-effectiveness analyses) the change of this criterion to 8 doses per vial. We believe the training for management of contacts (and other priority groups) in the absence of PPD will result in a moderate increase in treatment in Q3 compared to Q2, and that training for TST in Q3 will result in an acceleration of this progress in Q4. A central activity of Q3 will be monitoring of the record books and the RedCap use by HCW.

6. Describe any internal or external factors* which may have influenced the identification of person with TB, TB infection, TPT initiation or TPT completion in your EP and CP (both positively or negatively). What changes were observed? How did they influence your results?

* Internal factors are related directly to project activities e.g., staff capacity and motivation, availability of commodities. External factors are more health systems related and can include political unrest, health care worker strikes, national stockouts of commodities, initiation, or termination of service delivery activities by other organizations, changes in reporting units, and implementing new/improved diagnostics by others, etc.

We have not identified internal factors so far, but we have limited available data.

External factors include the shortage of PPD, which has reduced TPT prescription in EP and CP. We expect from Q3 onwards, a positive impact in EP and CP of (i) return to normal provision of PPD and (ii) more involvement of nurses in test and treatment prescription and (iii) a national effort to train nurses for this task. The ExpandTPT team is involved in this effort. However, we do expect an accelerated progress in EP, as close surveillance and improvement of TST access is planned.

7. Comment on how data quality was assessed during the reporting period.

Please see below, we only have data from the national information system IL-TB for Q2. The project does not conduct quality control data of the IL-TB data, but we will be able in the future to control data quality by comparing the project's data (registry books, RedCap data) with the IL-TB data. We will check the quality of 20% of the registry book data in each clinic until we consider completeness and quality to be satisfactory (minor issues will be accepted).

Health Systems Strengthening

8. Describe how your project contributed to health systems strengthening.

- Describe which building blocks your project contributed to and how? (Leadership and governance, service delivery, financing, workforce, medical products and technologies, information systems, and community engagement)
- Describe any challenges related to implementing HSS activities and how these were mitigated.

HRH: Capacity building

Initial virtual training on the national guidelines were conducted. Lists of attendance are available at https://drive.google.com/drive/folders/1AeXD50aOcOP49NX_S9fz9fOFL4t__fEq?usp=drive_link

The table below summarizes the number of trainees for the general virtual training sessions

Category	Rio de Janeiro	São Paulo	Manaus	Recife	Porto Alegre
MD	19	70	90	48	45
Nurses	142	357	244	120	139
CHW	249	1281	479	295	272
Others	176	463	264	132	272
Total	586	2171	1077	595	728

Service delivery:

We are currently unable to inform number of identified contacts, TST applied and turnaround time as the registry books – our source for systematic collection of these data – are not in place yet, they were recently distributed, HCW are being trained progressively, and data (including from Q2, retrospectively collected) will be available in the next report. However, São Paulo and Manaus have their own data information system.

We observed a reduction in the number of contacts identified and tested in Q2 (local data available from 2 cities only). We also observed a slight decrease in the total number of contacts who received TPT prescription in Q2, compared to Q1. This may be due to the absence of PPD. The only exception is Porto Alegre, where there was a very low rate of TPT prescription before the beginning of the project. The decrease among PLHIV is smaller, as most PLHIV recently diagnosed have CD4 \leq 350/mm³ and the recommendation is to treat all, regardless of TST or IGRAs. Also, for PLHIV with $>$ 350/mm³, QFT-Plus is available. A decrease in the proportion of TPT completed is also observed but may be due to delay in notification of treatment outcomes, as we expect an increase in treatment completion as 3HP uptake increases.

Indicator	São Paulo		Manaus		RJ		Recife		Porto Alegre	
	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
Contacts identified	3773	3130	1658	2091	-	-	-	-	-	-
Contacts tested for TBI	1314	497	188	122	-	-	-	-	-	-
Contacts starting TPT	1099	859	215	146	572	498	98	61	68	109
Contacts completing TPT	127	9	138	8	247	53	6	0	21	0

We can see in this table that in the city where information is available, more contacts were identified, but less tests were done.

Information system:

With the support of the ExpandTPT project, Manaus municipal TB management created an information system that links contacts to index patients' care and links their records directly with the National Information Systems. For the first time, there is a pilot that allows data to be exchanged directly from the municipal records to the national systems. This was presented to the NTP and after implementation in Manaus will eventually be adopted by the NTP.

In addition, the new registry book of ExpandTPT, which collects cohort type data based on the index case was further adapted by the NTP surveillance manager and should be implemented in the country soon. This is an important progress as currently, their book does not capture all steps of the cascade, just the number of TPT prescriptions and the proportions of TPT outcomes.

Because the books are in phase of implementation, we do not have completeness or quality control of data, we will have retrospective (and prospective) data in Q3. As mentioned before, we have trained 417 HCW to train other HCW to fill the book.

Implementation Research

9. If your project is conducting implementation research, describe any activities related to implementation research this quarter and what you are planning for next quarter.

We are conducting a user's satisfaction baseline survey. Results will be available in Q3 report.

We have collected data on costs of tests, treatment, and human resources, for the cost-effectiveness analyses.

We have obtained ethical clearance in 4/5 cities (Porto Alegre still pending) for the HCW surveys on acceptability of new technologies (mTST, simplified protocol for TST, CAD implementation in 5 clinics in Rio).

The survey on acceptability of the registry book should start shortly, by the end of Q3.

Advocacy for Awareness, Sustainability, and Scale-Up

10. Describe your advocacy activities including your partner engagement (especially with the NTP and CCM), results sharing/dissemination and advocacy efforts during the quarter.

- How has your project promoted and improved awareness among health care providers and the community on the importance of initiating and completing TPT?

CAB formation and members selection: The conception of CAB, its goals, needs, feasible size and profile composition has initiated prior to the program launch (Feb/Mar 2023). The ExpandTPT program short term and intense schedule of capacity building (for members), trainings (for HCW and CHW) and meetings, as well as the revision of several documents, would demand considerable dedication by CAB members. Therefore, CAB formation required initial mapping of available and engaged/responsive advocates in respective 5 cities where the program would take place. Initially, the CAB coordinator established the Terms of Reference for the CAB composition with clear tasks and expected performance. Then he has mapped the TB advocates and other relevant advocates (e.g., sex workers, black movement, AIDS activists). The CAB coordinator conducted several interviews for selection, according to the criteria of the ToR. All CAB members were chosen for their high profile, experience, active participation in different local committees. First CAB meeting took place on 28-March-2023.

CAB composition: Initially three advocates from each of the 5 cities were selected. Two members, one from Porto Alegre (POA) and one from São Paulo were selected as resource-persons, as they are experienced advocates. But lately only the POA member remained. Then, one CAB member from São Paulo was selected as CAB coordination assistant; she has served as in another CAB previously. The 14-people CAB is therefore composed of 13 regular members – all very active and engaged – and one resource person; this one attend *ad hoc* meetings, provides capacity building and help revising docs. CAB members’ backgrounds vary from experienced TB and HIV/AIDS advocates, to advocates in sex workers networks, a former TB manager and two graduated community researchers.

CAB activities: CAB members were initially required to participate in on-line capacity building for TB Advocates, one created by the Coordinator. The ExpandTPT **specific tasks** along 2023Q2 (April-June 2023) were:

- Review and adhering to the ToR and confidentiality terms (Mar/Apr 2023);
- Review of protocol of program, reporting and discussing with PI the conditions of the program (Mar/Apr 2023);
- Participation in all capacity buildings (for members) and trainings (for HCW and CHW) since 10-April-2023;
 - o Initially, all CAB members participated in all capacity building sessions (for both HCW and CHW), to exchange experience and learn from different contexts;
 - o As from late April, early May, CAB Coordinator requested CAB members should focus participating in capacity buildings and trainings to their respective cities, as demand/schedule was too high and to avoid burn-out.
- Review of complementary documents to the study and planning participation on trainings, meetings:
 - o General information and schedule for capacity building, trainings (March);
 - o Information for contact people eligible for TPT; potential, prospective “patients” (April);
 - o Pocket Guide to Health Care Workers: physicians, nurses, and pharmacists (May).

Initially, the Pocket Guide (educational material) to HCW was intended to be provided also to the CHW. Nevertheless, the CAB members expressed a strong recommendation the material should

be adapted to the CHW needs, and consulted, validated with them. CHW are key elements for the success of the ExpandTPT program, as they reach out and are the ones conducting community case-finding initiatives. The PI has then requested the CAB to develop a specific material (guide) to the CHW.

The coordination established a schedule from May to mid-August 2023, to produce the material, consisting in three waves of consultation, revision:

1. Revision of CHW guide's terms and info by CAB members according to their own community experience (May);
2. Two virtual national consultation with 4 appointed CHW at each of the 5 cities (June), total of **20 CHW**. The two virtual consultations, with 10 people each, was carried by the CAB resource person, who is specialized in Focal Groups conduction.
3. Two in-person consultation with CHW at (2) different Primary Health Care Units at each of the 5 cities took place along June, 2023. CAB members of each city conducted the consultation. They participated, previously to the consultation, in a two-sessions capacity building run by Coordinator and Resource Person. A total of **174 CHW** attended the 10 different in-person consultations (2 each city), each session lasting around 2 hours.

The initiative proved to be very effective, having revised a great deal of the content and covered needed topics and points CHW deal directly. The feedback (evaluation) by CHW was highly positive; they have appreciated the opportunity to express themselves and let clear what is missing to the good accomplishment of their work. Health units managers also expressed their gratitude and highlighted the benefits of such initiative.

At each wave, the material was revised and adapted according to the requests and suggestions by CHW. The revision work at each wave was done in close contact with the design company developing the material.

A careful preparation for the consultation was carried out by all CAB members at their respective cities, in accordance with the local TB program and with the support of the local focal point. CAB members previously visited each health unit where each consultation would take place, prepare the space and logistics and interact with local health unit manager and CHW's head.

The material guide is under finalization, which is expected to be ready for validation in August 2023.

Please see pictures of the CAB in-person consultation with CHW attached in five cities (June 2023)

Communication

The ExpandTPT Program/study has created an Instagram (IG) account, where the trainings, meetings and capacity building are documented.

According to the platform's report, there were in the period of the Quarter 2 (2023Q2) a total of 2151 (IG) profiles were reached (info distributed) and 5618 reactions were marked (annex 2).

<https://acrobat.adobe.com/id/urn:aaid:sc:US:0567a132-ffbb-4ea4-8c9a-154ae40092a8>

The IG account has been in the 2023Q2 focusing on documenting the activities on the health programs and health units side.

Please describe activities that you conducted to provide gender responsive services and/or empower women?

Larissa Oliveira, staff member from Rio de Janeiro responsible for the mTST activities, was accepted to the Federal University of Rio de Janeiro Internal Medicine Post-Graduation Course as an M.Sc. candidate, under Anete Trajman's supervision.

Priscilla Wolter, programme manager, is applying to the same PG course, under Anete Trajman's supervision. Dissertation of both will be on the project's data.

Dinah Cordeiro, focal point in Manaus, is a PhD candidate in the Federal University of Rio de Janeiro Internal Medicine Post-Graduation Course as an M.Sc. candidate, under Anete Trajman's supervision. Her thesis will be on the acceptability and feasibility of new TST training methods.

We have involved 5 medical students in the users' satisfaction survey, 4 of which are female.

Finally, **out of the 5157 trainees, 4417 were women**. Of these, 2262 were CHW, 907 nurses, 187 doctors, 140 pharmacists and 921 from other professional classes.

We have hired 9 females out of 10 staff for the ExpandTPT program.

Four ExpandTPT staff members are candidates to the Sanitary Pulmonology Specialization course by Fiocruz, MoH.

Story from the Field

11. Provide a story from either person who accessed services that you provided under this TB REACH grant or from program staff/ health care workers who worked under this grant about their experiences and how their lives have been changed due to your program? Please insert relevant photos if available and be sure to get permission from the persons profiled for use of their photo. Stop TB Partnership will use these stories and photos to promote grantee's work.

Pictures are available at Communication Report (<https://acrobat.adobe.com/id/urn:aaid:sc:US:0567a132-ffbb-4ea4-8c9a-154ae40092a8>), as well as in the selection of CAB in-person consultation with CHW attached in five cities (June 2023).